IN SITU INJECTION REPORT

FOR
FORMER MOBIL SERVICE STATION 99-MST - 979 MAIN STREET (1001 MAIN STREET) BROWNFIELD CLEANUP PROGRAM SITE NO. C915260
CITY OF BUFFALO, ERIE COUNTY, NEW YORK

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ACRONYM LIST

BCP	Brownfield Cleanup Program
bgs	Below Ground Surface
BTEX	Benzene, toluene, ethylbenzene and Xylene
C&S	C&S Engineers, Inc.
COC	Certificate of Completion
ISCO	In-situ Chemical Oxidation
LNAPL	Light Non-aqueous Phase Liquid
LUST	Leaking Underground Storage Tank
MSDS	Material Safety Data Sheet
NYSDEC	New York State Department of Environmental Conservation
SCO	Soil Cleanup Objectives
Site	Conventus Building located at 1001 Main Street Buffalo, NY
SMP	Site Management Plan
TMB	1,3,5-trimethlybenzene, 1,2,4,5-tetramethylbenzene and 1,2,4-trimethlybenzene
VOC	Volatile Organic Compound

1 INTRODUCTION

C&S Engineers, Inc. (C&S) has prepared this In situ Injection Report on behalf of Conventus Partners LLC for the former Mobil Service Station 99-MST – 979 Main Street (now 1001 Main Street). **Figure 1** shows the location of the Site.

The Site is located at 1001 Main Street (formerly 979 Main Street) in the City of Buffalo. The Site was remediated by Conventus Partners, LLC, Kaleida Properties and Kaleida Health under the New York State Brownfield Cleanup Program (BCP) in 2013.

Contamination was present on the Site due to a release of gasoline at a service station formerly located in the southwest portion of the Site. The Site has undergone extensive remediation conducted January 2013 through May 2014, and these efforts included the removal of unsaturated soils which were the source of contamination; light, non-aqueous phase liquids (LNAPL); and contaminated groundwater. However, residual contamination exists in the groundwater present at the Site.

The Site was given a Certificate of Completion (COC) on December 23, 2014. As part of the COC, the remedial party is responsible for implementing engineering controls related to the residual groundwater contamination for no more than five years (December 2014 through December 2019) and has demonstrated to the NYSDEC there has been a bulk reduction in groundwater contamination to asymptotic levels.

This report describes the results of fourth and fifth injection events completed to reduce concentrations adjacent to four groundwater monitoring wells located in the lower floor of underground parking and subsequent groundwater sampling to evaluate the efficacy of the treatment.

1.1 Site Conditions

1.1.1 Soil and Groundwater Contamination

Petroleum from leaking underground storage tanks (LUSTs) formerly located at a Mobil Service Station at the corner of Main and High Streets spilled petroleum products into the subsurface soils and groundwater for over 30 years. The main release area is located in the approximate area of the former LUSTs where contaminated soils were observed from 10 feet below ground surface (BGS) to approximately 20 feet BGS grade.

From the main release area, historic migration of petroleum product entered into a semi-confined coarse sand and gravel lens observed approximately 32 to 35 feet BGS. The water table is present within this semi-confined coarse sand and gravel lens. This lens varies in thickness (1/2 to 3 feet) and extends to the northeast, confined laterally to the east and west. Petroleum product within this lens generally moved horizontally across the Site with groundwater flow.

Because of low carbon in the fine sand silt and gravel formations, breakdown of benzene, toluene, ethylbenzene and xylene (BTEX) compounds was slow. Dissolved BTEX, once entering the groundwater bearing zone was transported via localized, preferential

groundwater flow to the northeast corner of the Site (following the location of the sand/gravel lens).

The area impacted by the petroleum spill included not only the Site but an area upgradient of the Site, along Main Street, and a downgradient area, along Goodrich Street. Prior to the remediation, the on-site and off-site impacts was planned to be managed under separate regulatory regimes. All on-site remediation would be conducted under the BCP while the offsite contamination, would continue to be addressed under the NYSDEC Spills Program (NYSDEC Spill #9500234). In January 3, 2013, as part of the remediation program for the off-site contamination (referred to as the "Spill Site"), the NYSDEC and Kaleida Health entered into a Stipulation Agreement. In that same year, the Conventus Site (Site) was entered into the BCP.

Onsite and offsite monitoring wells are shown in **Figure 2**.

1.1.2 Geology and Hydrogeology

The Conventus Medical Office Building currently occupies the Site. During remedial activities, steel shoring was installed to a depth of 40 to 50 feet below grade around the Site. Across the majority of the Site, soils were excavated to 26 feet below ground surface (bgs). Two floors of underground parking were constructed underneath the Conventus building.

The Site geology begins at 26 feet bgs. Subsurface soils consist of dry to moist fine sand and silt formation extends to nearly 70 feet bgs. Between this massive sand and silt formation is a coarse sand and gravel layer that grades to a sand, gravel; and clay till formation. Underlying the overburden is a grey cherty limestone formation at approximately 90 feet bgs.

The principal groundwater bearing zone beneath the Site is located within the coarse sand and gravel layer between 32 and 35 feet bgs. This layer is of variable thickness (generally 6 inches to three feet) but is horizontally discontinuous. The layer is located within the central and northeastern portions of the Site, but does not extend completely to the southern, northwestern or southeastern areas of the Site and is confined by the dense fine sands and silt above and below the groundwater bearing zone.

The potential for exposure to the remaining groundwater onsite is extremely limited as the Site is capped with a concrete floor and two floors of subgrade parking. Off-site migration of the remaining groundwater contamination has been controlled due to sheet piling and building construction. Groundwater recharge from the surface has been eliminated due to the concrete floor of the parking garage, and the adjacent asphalt surface to the west which effectively covers 100% of the Site recharge area.

Off-site migration has been effectively eliminated by the presence of deep sheet piling that cuts off the groundwater bearing zone from downgradient areas.

1.2 Excavation and Groundwater Withdrawal

To address the bulk of the contamination at the Site, a plan was developed under the BCP to remove the source soils and LNAPL, which was expected to result in a decrease in

groundwater contaminant concentrations. An additional goal was to eliminate off-site migration of contamination via groundwater flow.

To initiate the remedial program at the Site, sheet piling was installed to depths of 40 to 50 feet along all site boundaries to provide structural stability of the surrounding lands. The remedial plan called for the removal of all impacted source soils and of the bulk of the contaminated groundwater. This action was also planned to effectively eliminate any hydraulic communication between the water-bearing zone at the Site (located at 32 to 35 feet below grade) and off-site. This action was intended to eliminate any migration of contamination, as well as eliminate any potential for migration of contamination from the Site to areas downgradient. However, due to the presence of infrastructure associated with the underground NFTA train tunnels along Main Street, the sheet piling in the southwestern portion of the Site (adjacent to wells MSMW-3 and MSMW-4) did not completely reach the originally intended depth of 50 feet.

Groundwater recharge from the surface was also eliminated due to the construction of the building, which completely covers the Site's surface recharge area.

The remediation of the Site consisted of the removal of 67,458 tons of petroleum contaminated soils and the removal of 537,490 gallons of light, LNAPL (free petroleum product) and contaminated groundwater within the source area. Through these actions all contaminated unsaturated soils were removed, thereby eliminating the on-site source of petroleum contamination. Under the BCP, the Site successfully achieved Track 2 cleanup standards via these removal actions. The NYSDEC awarded the Certificate of Completion (COC) in December 2014.

1.3 Additional Investigation and Remediation

1.3.1 Gravity Injections

During the post-remediation monitoring period, three in-situ chemical treatments were implemented on the Site from December 2013 through June 2015. In-situ treatment consisted of gravity-feeding a chemical oxidizer mixed with water directly into monitoring wells. The first application of treatment solution was RegenOX and Klozur persulfate. For the first application, BCP-MW-6 was treated only with RegenOX because of this monitoring well's close proximity to the earth retention sheeting and need to maintain the integrity of the steel sheeting.

These treatments appeared to have little impact on contaminant concentrations. Based on conversations between NYSDEC, C&S and Conventus Partners, LLC, it was determined that additional groundwater treatment options should be evaluated and potentially implemented before the end of the five-year timeframe.

1.3.2 Pump and Treat Pilot Studies

Limited groundwater extraction was conducted on-site to determine if contaminant levels could be reduced using pump and treat techniques. The first pilot study was implemented from December 2015 to March 2016. A second pilot study was implemented from November 2016 to January 2017.

Groundwater was removed using submersible electric pumps. The total volume of groundwater removed was 4,762.2 gallons during the first event and 6,161 gallons during the second event.

Groundwater sampling was conducted before and after the groundwater withdrawal events. Based on sampling results, the Pump-and-Treat Pilot studies did not appear to have a significant effect on the groundwater contaminant concentrations.

1.3.3 Off-site Pump Test

In July 2016, C&S conducted a pump test on BCP-MW-6 and monitored the four wells along Main Street. The reason for this pump test is that the presence of the NFTA infrastructure impeded the advancement of sheet piling to the planned terminal depth of 50 feet in the southwestern portion of the Site. The results of this pumping test demonstrated that a hydraulic connection exists between the off-site (Main Street) and on-site wells.

Groundwater flow is generally limited to a slight gradient from the corner of Main and High Streets toward the Site, through the gap in the sheet piling. One of the off-site wells (MSMW-2) is significantly more contaminated than the on-site wells, and concentrations in samples collected from this well are three times higher or more than the on-site concentrations. Due to the hydraulic connection and higher levels of contaminants in off-site wells, there is a concern that upgradient off-site contamination will act as a continuing source of contaminant concentrations at the Site.

The cleanup of groundwater contamination along Main Street continues to be addressed under the NYSDEC Spills Program (NYSDEC Spill #9500234) with a Stipulation Agreement between the NYSDEC and Kaleida Health. This Stipulation Agreement commits Kaleida Health to the cleanup of any offsite contamination related to the Main Street spill. Kaleida Health is actively remediating the Main Street contamination with in-situ oxidative treatments.

1.3.4 On-site Pump Test

Following receipt of the July 2016 pump test results, the NYSDEC requested additional remedial efforts, including the collection of additional data on the hydraulic communication between the on-site monitoring wells. The pump test was conducted on BCP-MW-4, a 2-inch diameter monitoring well, located approximately within the center of the Site. Pressure transducers were placed in BCP-MW-3, BCP-MW-4, BCP-MW-5 and BCP-MW-6.

The results of this pumping test demonstrated that groundwater flow is generally limited to a slight gradient from the corner of Main and High Streets toward the Site. The groundwater contours in the remainder of the Site suggest a general lack of flow, as gradients are generally towards the center of the Site. This result suggests that the sheet piling has been effective in eliminating hydraulic connection to areas outside the Site, with the exception of the southwestern corner. During pumping, water levels were affected in the monitoring wells with pressure transducers indicating that there is a hydraulic connection between these wells.

The July 2016 pump test demonstrated a hydraulic connection exists between on-site wells BCP-MW-01 and BCP-MW-06 and off-site wells MS-MW-02, -03, and -04. Coupled with the November 2016 pump test results, which demonstrated a connection between on-site wells BCP-MW-3, -4, -5, and 6, all on-site and off-site wells, with the exception of MS-MW-01, appear to have some level of hydraulic connection.

Figure 3 presents groundwater contours for onsite and offsite monitoring wells.

1.4 Ongoing Monitoring

As a requirement of the COC, a Site Management Plan (SMP) was established for the Site. The SMP required:

- Quarterly groundwater monitoring for two years;
- Annual Site wide inspection; and
- Periodic in-situ chemical treatment to reduce BTEX concentrations to asymptotic levels.

During construction, seven groundwater monitoring wells were installed on the lower floor of underground parking. These wells were installed to monitor remaining groundwater contamination within the footprint of the Conventus Building. To evaluate the impacts of the source removal and of subsequent remedial activities, the following monitoring wells were sampled on a periodic basis since the completion of the source removal:

- BCP-MW-1
- BCP-MW-2
- BCP-MW-3
- BCP-MW-4
- BCP-MW-5
- BCP-MW-6
- BCP-MW-7

Figure 2 shows the well locations and **Table 1** summarizes the analytical results generated for these wells since 2013.

2 TREATMENT PROGRAM

Considering that gravity fed treatments were not reducing groundwater contaminants, during the reporting period pressure injections were completed to continue to reduce contaminant concentrations. Borings were advanced in the lower floor of underground parking to apply in-situ treatments under pressure directly into the contaminated sand and gravel lens. The sections below describe the methods used to conduct two in-situ treatment events.

2.1 In situ Chemical Oxidizer (ISCO)

The remedial method for this Site is chemical oxidation using sodium percarbonate ($Na_2CO_3 \bullet 3\ H_2O_2$). Sodium percarbonate is a common oxidant and has demonstrated significant effectiveness in oxidizing petroleum hydrocarbons. By-products from the reaction include carbon dioxide, sodium chloride, water and carbonic acid; these by-products are non-toxic at the levels produced.

Sodium percarbonate has the potential to be the most persistent oxidant within the subsurface and thus can travel with groundwater to reach areas not accessible via surface injection. The equation below describes the chemical oxidation reaction in the presence of sodium percarbonate:

$$C_2Cl_4 + 4/3\ Na_2CO_3 \bullet 2\ H_2O_2 + 4NaOH \longrightarrow 2CO_2 + 4\ NaCl + 4\ H_2O + 4/3\ Na_2CO_3$$

The ISCO product is RegenOX manufactured by Regenesis. RegenOX is formulated to degrade petroleum hydrocarbons through direct oxidation and through the generation of free radical compounds which will also oxidize contaminants. RegenOx is a granulated crystalline that is mixed in water prior to subsurface injection. RegenOx was shipped in 40-pound plastic bags.

RegenOx produces minimal heat and pressure and is non-corrosive, making it a relatively safe chemical oxidant that is compatible for use in direct contact with underground infrastructure such as utilities, tanks, piping, and communication lines. This was an important characteristic when selecting the ISCO product due to the close proximity of the monitoring wells to the earth retention sheeting for the Conventus Building.

2.2 Storage of ISCO Chemicals

ISCO products were shipped directly to the Site and stored in conditions in accordance with the manufacturer's specifications. Decontamination of equipment, storage, personal protection, and other related safety concerns was completed in accordance with the Material Safety Data Sheets (MSDS) and vendor recommendations. Oxidant safety materials are presented in **Appendix A**.

2.3 Mixing of ISCO Chemicals

Trec Environmental, Inc. was contracted to perform the in situ injections. Injections were conducted on May 24 – 25, 2017 and September 13 – 15, 2017. RegenOX was mixed in steel, 55-gallon drums. Bags of ISCO product were carried to a trailer mounted mixing station.

ISCO product and water was mixed according to manufacturer's specifications. Injection borings received a 6% ISCO solution. RegenOX was mixed with tap water in 55 gallon drums at a concentration of 100 pounds of RegenOX with 110 gallons of water for each location.

2.4 Injection Borings

The ISCO solution was directly injected into the soil in 12 borings in the sub-basement. Three borings were advanced adjacent to each monitoring wells listed below:

BCP-MW-3	BCP-MW-5
BCP-MW-4	BCP-MW-6

Injection borings (IB-01 through IB-12) are shown in **Figure 4**. Each injection boring had to be carefully located to avoid hitting utilities located underneath the floor, with the intent of being within 10 to 15 feet of each monitoring well. Each injection boring was advanced into the coarse sand and gravel layer, approximately 15 feet below the concrete floor.

The ISCO solution was pumped from the mixing station to a truck mounted geo-probe and into the subsurface. The mix of RegenOX and water was injected under pressure in each boring, and the 12 injection borings received approximately 100 pounds of RegenOx. Additionally, 100 pounds of ISCO material was gravity fed directly into each monitoring well. A total of 1,600 pounds of RegenOx was used for each treatment event. For two treatments, a total of 3,200 pounds of RegenOX was used.

3 GROUNDWATER MONITORING

3.1 Field Sampling Program

Groundwater monitoring was conducted prior to the injections to provide a comparison to post-injection results and assess the efficacy of the treatment.

3.1.1 Monitoring Well Array

The Site contains a total of seven monitoring wells installed in August 14 – 16, 2013 and, September 12, 2013. The monitoring wells below have been shown to be directly within the contaminant plume and are used to monitor groundwater quality.

Table 3-1: Post-Remediation Wells

Well ID	Diameter
BCP-MW-1	2”
BCP-MW-2	8”
BCP-MW-3	8”
BCP-MW-4	2”
BCP-MW-5	2”
BCP-MW-6	8”
BCP-MW-7	2”

All wells were installed through native materials and the gravel water bearing layer. All wells were installed to an approximate depth of 43 feet below surrounding grade (approximately 16 feet below basement floor elevation).

The monitoring well locations were located in areas of previously identified groundwater contamination and to the south of the plume to confirm that contamination had not moved off-site to the south.

BCP-MW-2 was installed adjacent to the source area that was backfilled with flowable fill. Since its installation, this well has been dry. NYSDEC requested the well be modified to evaluate if groundwater underneath the flowable fill mass contains residual contamination. On October 7, 2015 Nature’s Way Environmental installed a 1-inch PVC well through the existing BCP-MW-2 to a final depth of 50 feet bgs. The modified well has remained dry. This provides additional evidence that groundwater and petroleum contamination are limited to the coarse sand and gravel layer 32 to 35 feet bgs.

3.1.2 Groundwater Sampling

The groundwater monitoring activities included the collection of depth-to-water measurements at each monitoring well and the collection of groundwater samples for laboratory analysis. Pre-treatment sampling was conducted on May 17, 2017 and post-treatment sampling was conducted on July 5, 2017 and November 2, 2017. Groundwater sampling was conducted in accordance with the U.S. Environmental Protection Agency Low flow sample procedure. All equipment used for well purging and sampling was thoroughly washed with tap water and laboratory detergent, Alconox, prior to and after use.

3.1.3 Water Level Monitoring

Prior to purging and sampling each monitoring well was measured with an electronic water level indicator used to measure depth to water and total depth of each well. Measurements were referenced to the top of the well casing. All water levels and total depth measurements were taken to the nearest 0.01 foot.

3.1.4 Well Purging

Water quality parameters were tracked as groundwater was removed from monitoring wells. A ProActive Monsoon pump was used to purge monitoring wells until water quality parameters (temperature, specific conductivity, pH, oxygen reduction potential dissolved oxygen and turbidity) were stabilized.

3.1.5 Groundwater Sample Collection and Analysis

Samples were collected from each well immediately after water quality parameters were stabilized. Samples were collected from polyethylene tubing into appropriate sample jars. The sample containers were chemically preserved by the laboratory prior to the field activities. Samples collected for volatile organics analysis were overfilled to form a convex meniscus and, after collection, the sample container was inverted to check for the presence of air bubbles in the sample. All samples were placed in coolers on ice to maintain samples at 4 degrees Celsius. A chain–of–custody manifest was completed on-site and accompanied the samples to the lab. Samples were analyzed for volatile organic compounds (VOC) using EPA Method 8260C.

3.2 Pre-Treatment Results

3.2.1 Groundwater Elevations

Groundwater elevations is shown on **Figure 3**. These elevations show that groundwater is generally flowing to the north and east.

3.2.2 Laboratory Analysis

Samples were analyzed by Paradigm Environmental Services. The following presents observations associated with the pre-treatment samples:

- The lab confirmed that samples were obtained intact
- On ice and cooler temperature was acceptable
- Chain-of-custody was filled out with all pertinent information
- No discrepancy with sample ID and chain-of-custody
- Samples were received within holding times
- VOA sample vials did not have headspace or bubble is < 6mm in diameter
- Sample bottles were completely filled

3.2.3 Groundwater Analytical Results

The pre-treatment analytical results are summarized in **Table 1** (provided at the end of this report), **Table 3-2** (located below) and on **Figure 5**. The groundwater results were compared to NYSDEC T.O.G.S 1.1.1 Ambient Water Quality Standards. Table 3-2 below presents total VOC and total BTEX concentrations for each monitoring well.

Table 3-2: Pre-Treatment (May 17, 2017) Total VOC and Total BTEX

Well ID	Total VOC	Total BTEX
BCP MW-1	0	0
BCP MW-3	1,540	1,287
BCP MW-4	2,947.4	2,613
BCP MW-5	4,064	4,013
BCP MW-6	661	626
BCP MW-7	0	0

BCP-MW-2 was installed adjacent to the source area that was backfilled with flowable fill. Since its installation, this well has been dry. NYSDEC requested the well be modified to evaluate if groundwater underneath the flowable fill mass contains residual contamination. On October 7, 2015 Nature's Way Environmental installed a 1-inch PVC well through the existing BCP-MW-2 to a final depth of 50 feet bgs. The modified well has remained dry.

3.3 Post-Treatment Results

3.3.1 Laboratory Analysis

Samples were analyzed by Pace and Spectrum Analytical. The following presents observations associated with the samples:

- The lab confirmed that the samples were obtained intact
- On ice and cooler temperature was acceptable
- Chain-of-custody was filled out with all pertinent information
- No discrepancy with sample ID and chain-of-custody
- Samples were received within holding times
- VOA sample vials did not have headspace or bubble is < 6mm in diameter
- Sample bottles were completely filled

One note regarding the two sampling rounds is that different laboratories were used to analyze the post-treatment groundwater samples, and these laboratories reported additional compounds, beyond the standard list used for all previous rounds. These laboratories reported concentrations of 1,3,5- trimethlybenzene, 1,2,4,5-tetramethylbenzene and 1,2,4-trimethlybenzene (collectively referred to as TMB). Previous samples collected for this Site have been analyzed by two other laboratories for Target Compound List (TCL) VOCs and their reports did not include TMBs. To provide an accurate comparison, the analytical tables do not include the TMB results in the total VOC

concentrations. To remain consistent with historical sampling results, the TMB concentrations will not be reported during future sampling events.

3.3.2 Groundwater Analytical Results

The pre-treatment analytical results are summarized in **Table 1** and on **Figure 5**. The groundwater results were compared to NYSDEC T.O.G.S 1.1.1 Ambient Water Quality Standards. Tables 3-3 and 3-4 below presents total VOC and total BTEX concentrations for each monitoring well.

Table 3-3: July 2017 Post-Treatment Total VOC and Total BTEX

Well ID	Total VOC	Total BTEX
BCP MW-1	5.1	0
BCP MW-3	254	14
BCP MW-4	511.9	64
BCP MW-5	6,780	5,664
BCP MW-6	925	677
BCP MW-7	2.3	2.3

Table 3-4: November 2017 Post-Treatment Total VOC and Total BTEX

Well ID	Total VOC	Total BTEX
BCP MW-1	1.4	0
BCP MW-3	2,224	1,713
BCP MW-4	116.7	99
BCP MW-5	9,009	7,635
BCP MW-6	5,526	5,398
BCP MW-7	5.35	3.9

BCP-MW-2 was installed adjacent to the source area that was backfilled with flowable fill. Since its installation, this well has been dry. NYSDEC requested the well be modified to evaluate if groundwater underneath the flowable fill mass contains residual contamination. On October 7, 2015 Nature's Way Environmental installed a 1-inch PVC well through the existing BCP-MW-2 to a final depth of 50 feet bgs. The modified well has remained dry.

4 FINDINGS AND RECOMMENDATIONS

4.1 Treatment Effectiveness

Sodium percarbonate was used to treat petroleum hydrocarbons in groundwater underlying the Conventus building. A total of 3,200 pounds of sodium percarbonate was mixed with water and injected into 12 soil borings and gravity fed into four monitoring wells in the underground parking garage of the Conventus building.

The table below presents a comparison of total VOC and BTEX concentrations from each monitoring well and the percent change from pre-treatment and post-treatment groundwater monitoring.

Table 4-1: VOC Concentration Change

Monitoring Well	*Percent Change Post Injections May 2017 to July 2017*	*Percent Change Post Injections May 2017 to November 2017*	*Percent Change Post Remediation Maximum to November 2017*
BCP MW-1	--	--	-99.4
BCP MW-3	-83.5	+44.4	-81.0
BCP MW-4	-82.6	-96	-97.5
BCP MW-5	+66.9	+121.8	-50.1
BCP MW-6	+39.9	+736	+22.6
BCP MW-7	--	--	-96.1

Note: Negative value indicates decrease in concentration and positives value indicates increase in concentration
BCP-MW-2 was dry. No samples were collected.

Table 4-2: BTEX Concentration Change

Monitoring Well	*Percent Change Post Injections May 2017 to July 2017*	*Percent Change Post Injections May 2017 to November 2017*	*Percent Change Post Remediation Maximum to November 2017*
BCP MW-1	--	--	-100
BCP MW-3	-98.9	+30.8	-85.2
BCP MW-4	-97.6	-96.2	-97.6
BCP MW-5	+41.4	+90.3	-56.8
BCP MW-6	+8.1	+762.3	+31.7
BCP MW-7	--	--	-96.6

Note: Negative value indicates decrease in concentration and positives value indicates increase in concentration
BCP-MW-2 was dry. No samples were collected.

Post-treatment samples collected on July 2017 shows a significant decrease in VOC concentrations in monitoring wells BCP-MW-3 and BCP-MW-4. Other monitoring wells show an increase in concentrations. Post-treatment samples collected in November 2017 demonstrate a rebound of contaminant concentrations in three of the four treated monitoring wells.

The likely reason for this rebound is the desorption of petroleum contaminants previously adhered to the sand / gravel material. As groundwater concentrations decrease, any organic compounds adhered to the saturated media will become soluble, thus increasing groundwater contaminant concentrations. Any future monitoring events would provide additional information regarding this observation, but it is expected that these desorbed contaminants will be oxidized over time, thereby reducing contaminant concentrations.

Despite the recent increases in concentrations in three of the monitoring wells, overall contaminant concentrations are significantly lower than the maximum concentrations recorded following the soil and groundwater removal efforts. Although concentrations are higher in BCP-MW-6 than during previous sampling events, total VOC concentrations in

other five monitoring wells have experienced decreases ranging from 50 to 99.4 percent, and the range in BTEX concentration decreases is 56.8 to 100 percent in these wells.

The poor response of BCP-MW-6 to past in-situ treatments and from pump/treat pilot tests may be related to the hydraulic communication between this monitoring well and the higher levels of contamination observed on the Main Street R.O.W.

The cleanup of groundwater contamination along Main Street continues to be addressed under the NYSDEC Spills Program (NYSDEC Spill #9500234) with a Stipulation Agreement between the NYSDEC and Kaleida Health. Kaleida Health is actively remediating the Main Street contamination with in-situ oxidative treatments.

Three in-situ treatments occurred in 2017 under the Spills Program cleanup for the Main Street Site. Analytical results indicate in-situ treatments are having a mixed effect on offsite groundwater contamination. High levels of contamination still exist around the offsite monitoring well located close to BCP-MW-6 and, as stated in Section 1.3.3, is hydraulically connected with each other. Additional injection locations on Main Street are not feasible due to significant subsurface public utility infrastructure located adjacent to the Conventus Building and the NFTA subway tunnel and its structural support system. Therefore, the only option is pressurized in-situ injections in existing monitoring wells. It should be considered that offsite pressurized injections may displace contaminated groundwater which could affect onsite contamination levels in BCP-MW-6.

4.2 Discussion

The Site was the subject of a significant remedial program that consisted of the removal of 67,458 tons of petroleum contaminated soils and the removal of 537,490 gallons of water and LNAPL and contaminated groundwater. Soils containing deep petroleum contamination (26 to 40 feet below ground surface) were removed and replaced with flowable fill. This effectively eliminated the worst petroleum contamination on-site and replaced it with an impervious mass of flowable fill that eliminates or greatly reduces the hydraulic communication within the Site. Sheet piling was also installed to eliminate hydraulic connections from the Site's water-bearing zone with the surrounding properties.

Through these efforts the soil contamination was completely remediated and the bulk of the groundwater contamination at the Site was addressed. **Figure 6** shows the concentration and extent of the original contaminant plume. However, the groundwater underneath the Conventus building retains some minor petroleum impacts.

Remedial activities have significantly reduced the size and concentration of the contaminant plume. The original plume extended throughout the Site and contained concentrations between 10,000 to 20,000 ug/L with some locations exceeding 50,000 ug/L. BCP-MW-6 and BCP-MW-3 were installed in a location from the original plume that contained concentrations over 42,000 ug/L and 20,000 ug/L, respectively. These areas have been reduced to 975 ug/L and 259 ug/L. The original contaminant plume has undergone significant bulk reduction in VOC concentrations.

After the completion of the initial remedial activities, the residual groundwater contaminant plume has been continually treated and monitored. Contaminant

concentrations have shown mixed results from in-situ treatments and limited groundwater extraction. Multiple factors complicate the treatment of the remaining groundwater contamination. Some of these factors include:

1. Limited Treatment Options

   - In Situ or Enhanced In-Situ Bioremediation – Previous work at the Site demonstrated that the groundwater contains very little carbon due to the nature of the surrounding soils. This has resulted in a dearth of microbes available to treat the groundwater in situ. This lack of microbes eliminates the viability of this approach for the Site.

   - Pump and Treat – The results of the pumping test have demonstrated that a hydraulic connection exists in different conditions across the Site. There are two eight-inch diameter pumping wells on-site – BCP-MW-3 and BCP-MW-6. Since BCP-MW-6 is hydraulically connected to off-site groundwater, any ongoing groundwater removal from this well would draw in the more significantly contaminated groundwater from off-site and result in increases in contaminant concentrations on-site. The lack of decreases in concentrations of contaminants in the pumped wells during the Pump-and-Treat Pilot Studies suggests that long-term pumping may not have a significant impact of groundwater quality at the Site.

   - Chemical Oxidant Injections – Three rounds of gravity fed chemical oxidation injections have already occurred at the Site, as reported to the NYSDEC in periodic reports. The injections were not effective in significantly reducing contaminant concentrations in groundwater. The fourth and fifth rounds of chemical oxidation injections in borings under pressure have shown mixed results.

2. The installation of the steel shoring system has benefited the Site by eliminating groundwater migration; however, this also severely limits the effectiveness of in-situ chemical oxidation because treatments will not greatly disperse from the point of injection due to a lack of groundwater flow.

3. Installing additional monitoring or pumping wells is not feasible due to the height of the parking lot ceiling.

4. Structural column footers and utility infrastructure underneath the concrete slab limits the placement of potential injection borings.

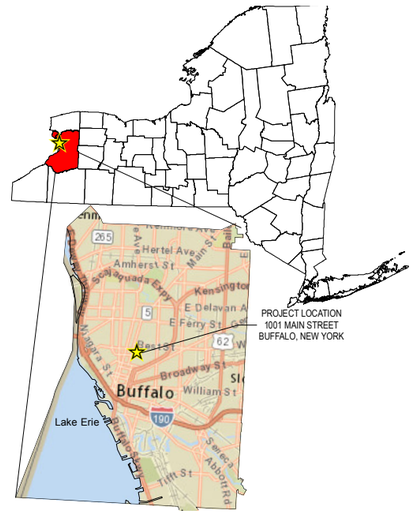
At this time, pressurized in-situ injections are the most efficient method to apply chemical oxidants into the subsurface, but the effectiveness of using chemical oxidants to reduce contaminant concentrations is limited by the factors described above. Additional treatment events or increasing the amount of chemical oxidant is not guaranteed to reduce groundwater contamination in the future.

4.3 Recommendations

Based on the results described above, it appears that significant onsite groundwater remediation has reduced BTEX concentrations 56.8 to 100 percent in five monitoring wells. Results for one monitoring well, BCP-MW-6, lag behind the other wells due to offsite contaminant loading to the Site. Given that offsite efforts are being addressed under a different NYSDEC Program and responsible party, we request to meet with the NYSDEC to discuss these findings and their implications on deeming the remediation complete.

F:\Project\K11-Kaleida Health\K11.002.001 - MOB Brownfield Cleanup Program\Environmental-study\Reports\Injection Report\Injection Report .docx

FIGURES



Legend

- Parcel Boundary
- Brownfield Cleanup Program Boundary

Property Note

1) The BCP Project Area ("Site") includes the entire western parcel [1001 Main Street (formerly 979 Main Street)] and extends approximately 40 feet east onto the adjacent eastern parcel (818 Ellicott Street). Total acreage of the BCP Project Site is 1.72 acres.

Notes

1) Groundwater elevation benchmark.

2) Coordinate System: NAD 1983 StatePlane NY West FIPS 3103
Projection: Transverse Mercator
Datum: North American 1983
Units: Foot US

0 30 60 120
Feet

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FORMER MOBIL STATION 99-MST
979 MAIN ST (1001 MAIN ST)
BROWNFIELD CLEANUP PROGRAM
BUFFALO, NEW YORK

MARK	DATE	DESCRIPTION

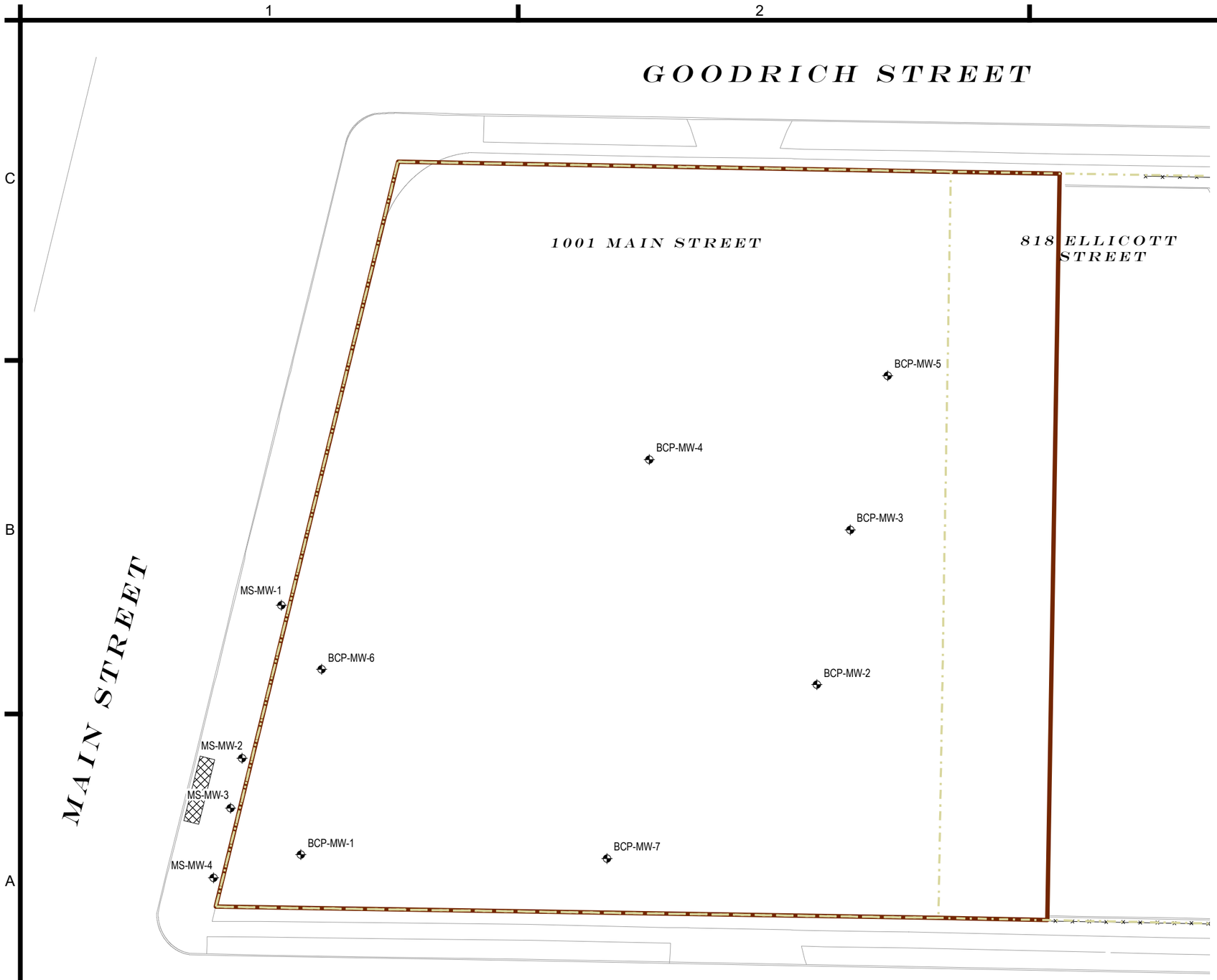
REVISIONS

PROJECT NO:	K11.002.001
DATE:	May 4, 2016
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	

SITE LOCATION

FIGURE 1

Path: F:\Project\K11-Kaleida Health\K11.002.001 - MOB Brownfield Cleanup Program\Environmental-study\CADD-GIS\GIS\Projects\PRR\FIGURE_2_PROJECT_BOUNDARIES.mxd



Legend

- Property Lines
- Brownfield Cleanup Program Boundary
- Groundwater Monitoring Well Location

Property Note

1) The BCP Project Area ("Site") includes the entire western parcel [1001 Main Street (formerly 979 Main Street)] and extends approximately 40 feet east onto the adjacent eastern parcel (818 Ellicott Street). Total acreage of the BCP Project Site is 1.72 acres.

Notes

1) Coordinate System: NAD 1983 StatePlane NY West FIPS 3103
Projection: Transverse Mercator
Datum: North American 1983
Units: Foot US

2) Survey data from McIntosh & McIntosh P.C. "Topographical Map of Part of Lot-29, TWP.-11, R.-8, Holland Purchase" Job No. 7669-B(2) September 24, 2008.

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FORMER MOBIL STATION 99-MST
979 MAIN ST (1001 MAIN ST)
BROWNFIELD CLEANUP PROGRAM
BUFFALO, NEW YORK

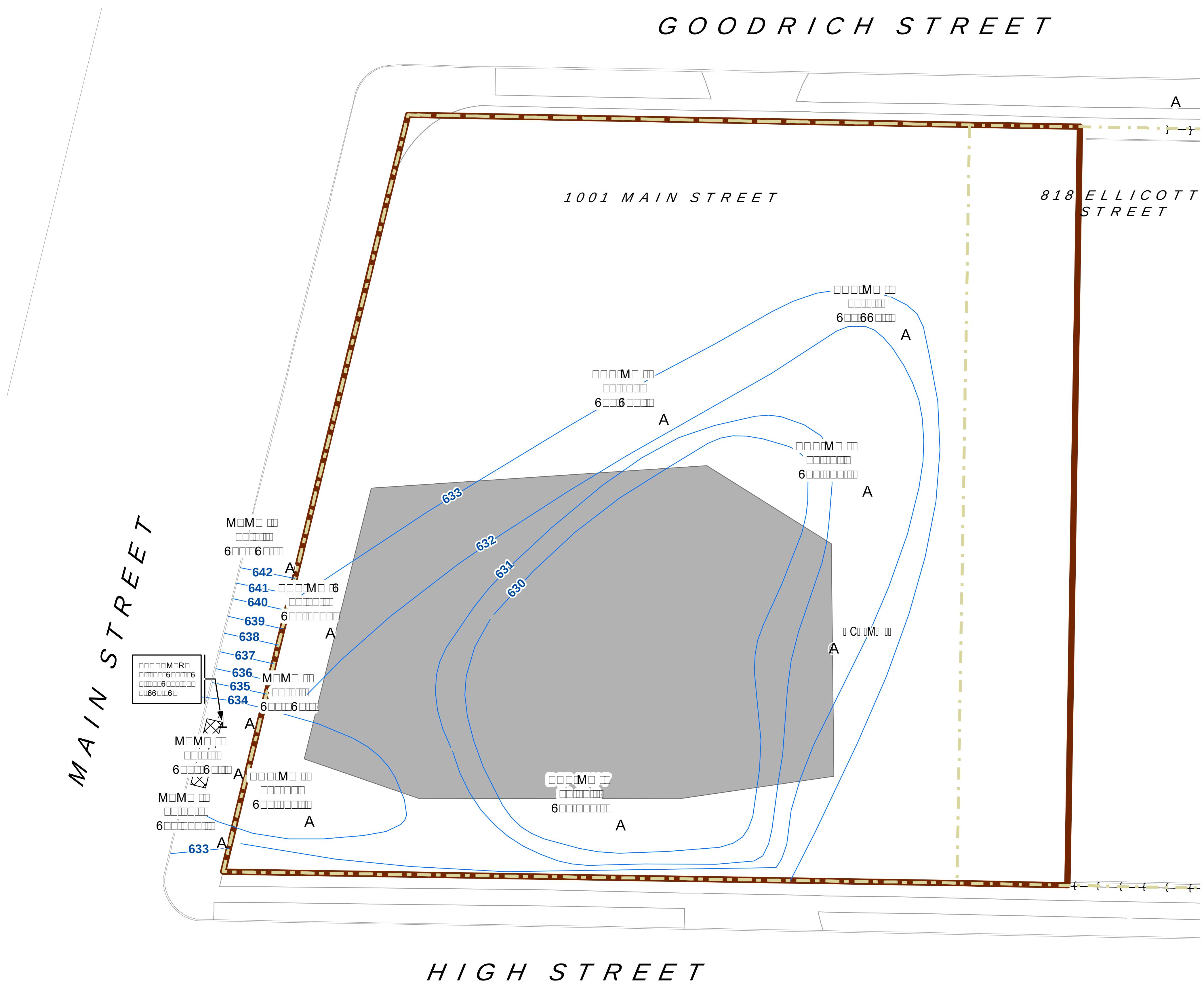
MARK	DATE	DESCRIPTION
REVISIONS		

PROJECT NO:	K11.002.001
DATE:	JUNE 15, 2016
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	D. RIKER

OFFSITE & ONSITE GROUNDWATER WELLS

FIGURE 2

Path: F:\Project\K11-Kaleida Health\K11.002.001 - MOB Brownfield Cleanup Program\Environmental-study\CADD-GIS\GIS\Projects\BCP_GW_WELL_LOCATIONS.mxd



Legend

Label Note

Property Note

Notes

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3

FORMER MOBIL STATION 99-MST
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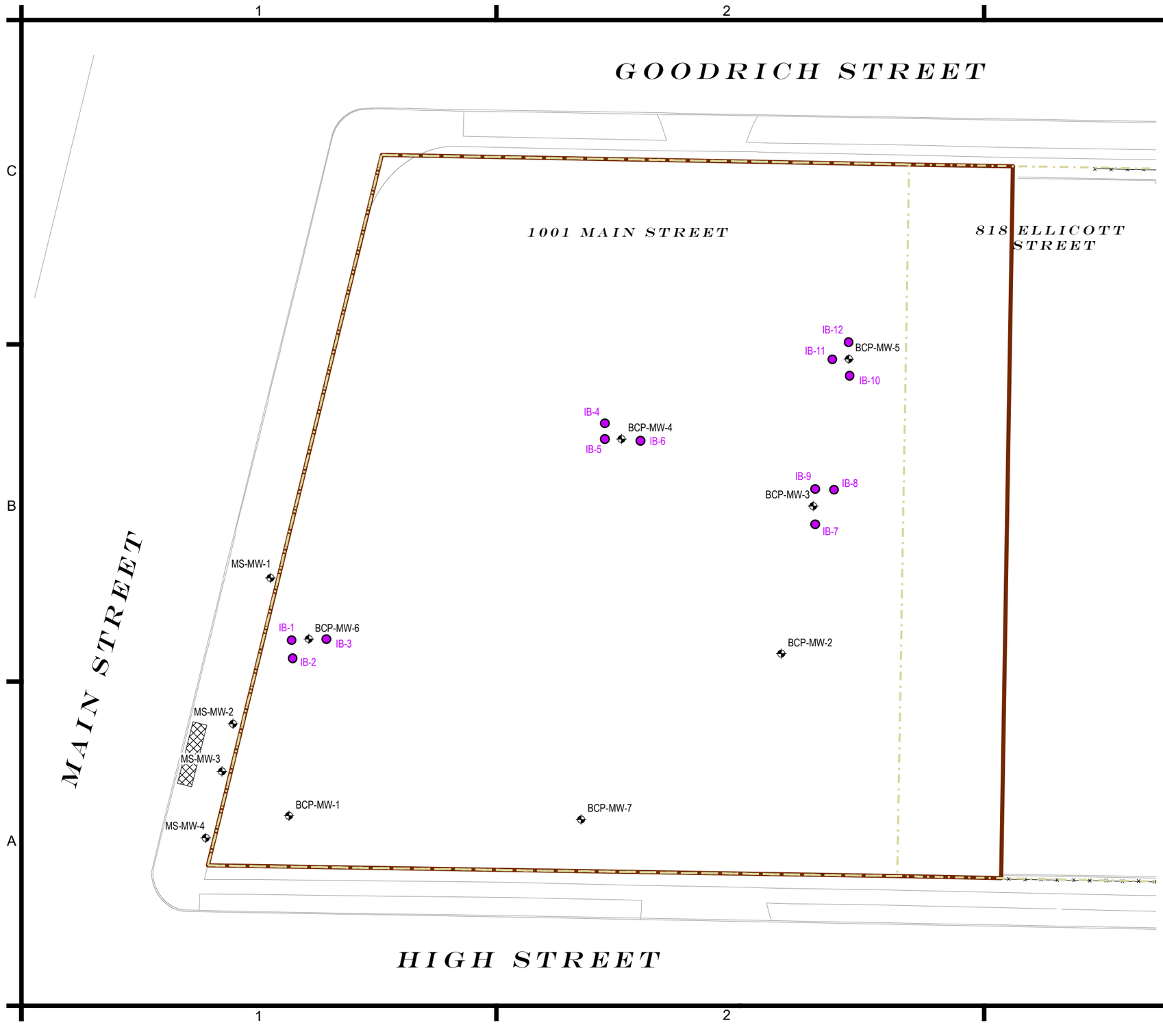
BUFFALO, NEW YORK



Legend

- Property Lines
- Brownfield Cleanup Program Boundary
- Groundwater Monitoring Well Location
- ISCO Injection Boring

Property Note

1) The BCP Project Area ("Site") includes the entire western parcel [1001 Main Street (formerly 979 Main Street)] and extends approximately 40 feet east onto the adjacent eastern parcel (818 Ellicott Street). Total acreage of the BCP Project Site is 1.72 acres.

Notes

1) Coordinate System: NAD 1983 StatePlane NY West FIPS 3103
Projection: Transverse Mercator
Datum: North American 1983
Units: Foot US

2) Survey data from McIntosh & McIntosh P.C. "Topographical Map of Part of Lot-29, TWP.-11, R.-8, Holland Purchase" Job No. 7669-B(2) September 24, 2008.

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BUFFALO, NEW YORK

MARK	DATE	DESCRIPTION

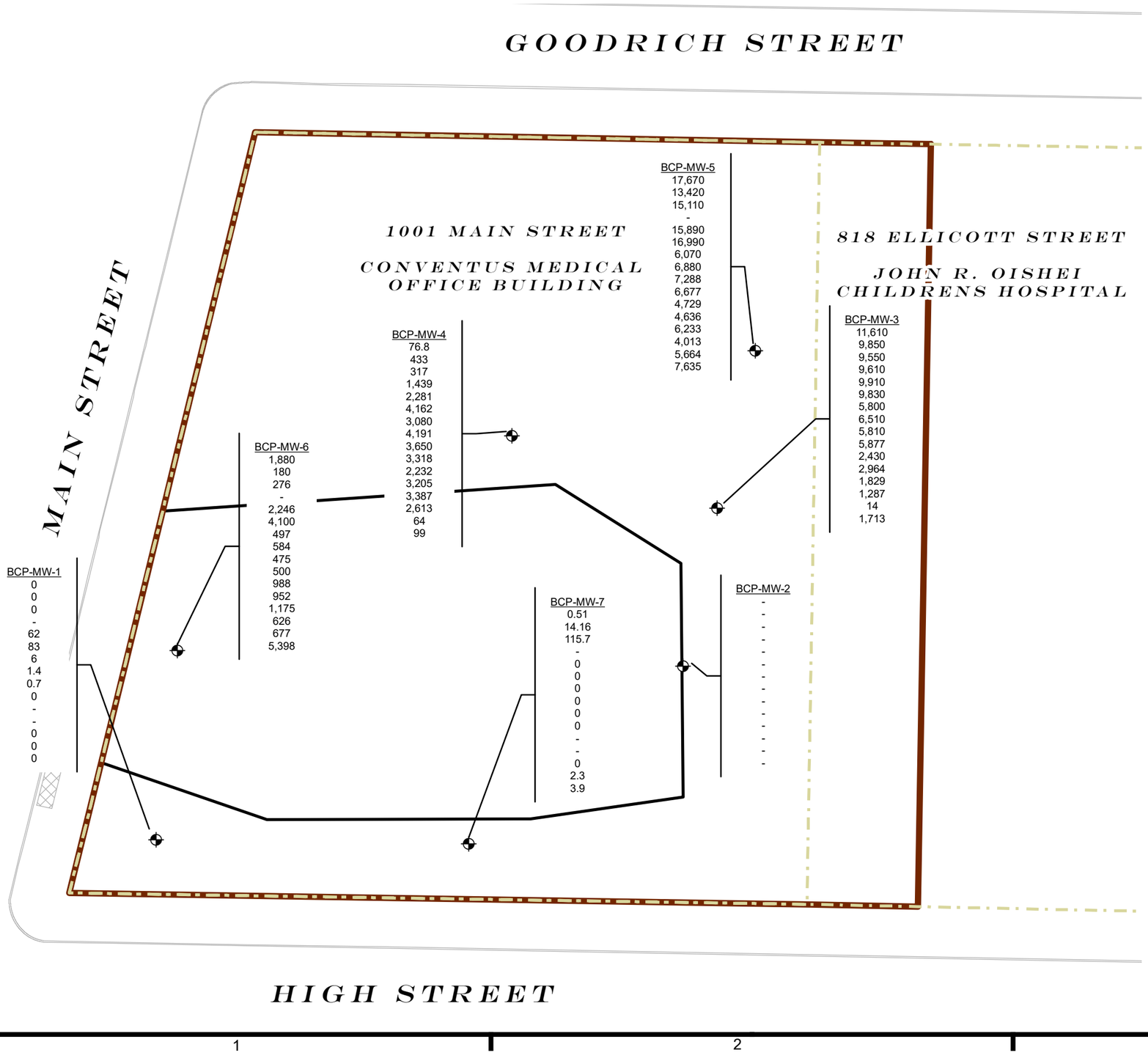
REVISIONS

PROJECT NO:	K11.002.001
DATE:	JUNE 15, 2016
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	D. RIKER

INJECTION BORINGS

FIGURE 4

Path: F:\Project\K11-Kaleida Health\K11.002.001 - MOB Brownfield Cleanup Program\Environmental-study\CADD-GIS\GIS\Projects\INJECTION_BORINGS.mxd



Legend

- Property Lines
- Brownfield Cleanup Program Boundary
- Area of Deep Excavation to -40 ft (below former ground surface)
- Groundwater Monitoring Well Location (Ground Floor of Underground Parking Garage)

Property Note

1) The BCP Project Area ("Site") includes the entire western parcel [1001 Main Street (formerly 979 Main Street)] and extends approximately 40 feet east onto the adjacent eastern parcel (818 Ellicott Street). Total acreage of the BCP Project Site is 1.72 acres.

Label Note

Total concentrations (ug/L) of benzene, toluene, ethlybenzene and xylenes ("BTEX") for each groundwater monitoring event.

BCP-MW-4	
76.8	September 2013
433	March 2014
317	May 2014
1,439	March 2015
2,281	June 2015
4,162	August 2015
3,080	December 2015
4,191	January 2016
3,650	March 2016
3,318	June 2016
2,232	October 2016
3,205	December 2016
3,387	January 2017
2,613	May 2017
64	July 2017
99	November 2017

Notes

1) Elevations from New York State Erie County LiDAR Dataset, 2005, NAD 88.

2) Coordinate System: NAD 1983 StatePlane NY West FIPS 3103
Projection: Transverse Mercator
Datum: North American 1983
Units: Foot US

3) Survey data from McIntosh & McIntosh P.C. "Topographical Map of Part of Lot-29, TWP.-11, R.-8, Holland Purchase" Job No. 7669-B(2) September 24, 2008.

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FORMER MOBIL STATION 99-MST
979 MAIN ST (1001 MAIN ST)
BUFFALO, NEW YORK

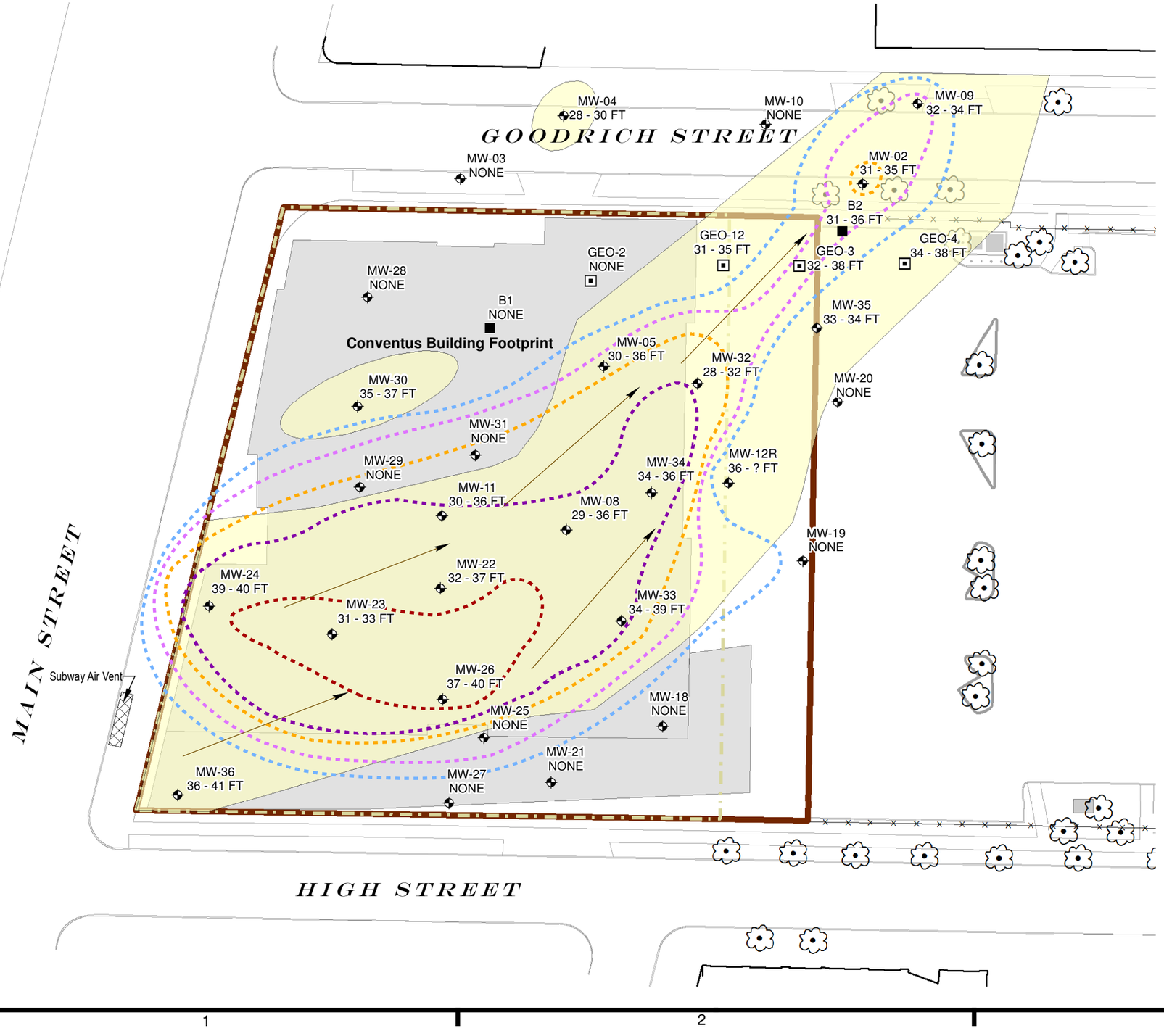
MARK	DATE	DESCRIPTION
REVISIONS		

PROJECT NO:	K11.002.001
DATE:	JULY 2017
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	D. RIKER

HISTORIC GROUNDWATER SAMPLE RESULTS

FIGURE 5

Path: F:\Project\K11-Kaleida Health\K11.002.001 - MOB Brownfield Cleanup Program\Environmental-study\CADD-GIS\GIS\Projects\Historic_GW_Results.mxd



Legend

- Parcel Boundary
- Brownfield Cleanup Program Boundary
- Coarse Sand / Gravel Groundwater Bearing Zone (at depth of approximately 28 ft below ground surface to approximately 41 ft below ground surface)
- Groundwater Monitoring Well Location
- Soil Boring Location
- Geotechnical Boring Location
- General Direction of BTEX Plume Flow

Total BTEX Isoconcentration Contours (ug/L)
February 2012

- <10
- 100 - 1,000
- 1,000 - 10,000
- 10,000 - 50,000
- >50, 000

Location Identifier — Depth of Coarse Sand / Gravel Zone

MW-24
39 - 40 FT
NONE = Not Present

Notes

1) Coordinate System: NAD 1983 StatePlane NY West FIPS 3103
Projection: Transverse Mercator
Datum: North American 1983
Units: Foot US

2) Survey data from McIntosh & McIntosh P.C. "Topographical Map of Part of Lot-29, TWP.-11, R.-8, Holland Purchase" Job No. 7669-B(2) September 24, 2008.

3) Analytical data from May 22, 2014 sampling event for monitoring wells within the BCP site and July 24, 2014 sampling event for monitoring wells along Main Street and Goodrich Streets.

4) Sources used include: Environmental Product & Services Logs (MW-01 through MW-16), 1997; Groundwater & Environmental Services Logs (B1, B2, MW-18 through MW-36); and Earth Dimensions Logs (GEO-01 through GEO-04 and GEO-12), 2010.

0 25 50 100 Feet

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CONVENTUS
1001 MAIN STREET
BROWNFIELD CLEANUP PROGRAM
BUFFALO, NEW YORK

MARK	DATE	DESCRIPTION
REVISIONS		

PROJECT NO:	K11.002.001
DATE:	SEPTEMBER 3, 2014
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	M. COLMERAUER

PRIMARY GROUNDWATER BEARING ZONE AND CONTAMINATION PLUME

FIGURE 6

Path: F:\Project\K11-Kaleida Health\K11.002.001 - MOB Brownfield Cleanup Program\Environmental-study\CADD-GIS\GIS\Projects\RI-IRM\FIGURE_121_GROUNDWATER_BEARING_ZONEA.mxd

TABLES

Table 1 - Groundwater Analytical Results
Summary of Detected Compounds
Former Mobil Station 99-MST 979 Main Street (1001 Main Street) Brownfield Cleanup

			Sample Name	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
			Date Collected	9/20/2013	3/19/2014	5/22/2014	3/11/2015	6/17/2015	8/3/2014	12/15/2015	3/22/2016	6/3/2016	10/25/2016	12/8/2016	1/20/2017	5/17/2017	7/5/2017	11/2/2017
			Matrix	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NYSDEC Ambient Water Quality Standards & Guidance Values																		
Volatile Organic Compound	**Surface Water**	**Groundwater**																
2-HEXANONE	50	50		ND	ND	ND		ND	ND	3.5	ND	ND	ND			ND	ND	ND
ACETONE	50	50		ND	ND	ND		ND	ND	ND	ND	ND	ND			ND	5.1	ND
BENZENE	1	1		ND	ND	ND		**35**	**39**	**5.7**	**1.4**	0.72	ND			ND	ND	0.33
ETHYLBENZENE	5	5		ND	ND	ND		2	1.5	ND	ND	ND	ND			ND	ND	ND
ISOPROPYLBENZENE (CUMENE)	5	5		ND	ND	ND		1.3	ND	ND	ND	ND	ND			ND	ND	ND
METHYL ETHYL KETONE (2-BUTANONE)	50	50		ND	ND	ND		ND	45	ND	ND	ND	ND			ND	ND	ND
METHYLENE CHLORIDE	5	5		ND	ND	ND		ND	ND	ND	ND	ND	ND			ND	ND	ND
TOLUENE	5	5		ND	ND	ND		**19**	**38**	0.55	ND	ND	ND			ND	ND	1.1
1,1,2-TRICHLOROETHANE	1	1		ND	ND	ND		ND	ND	ND	0.33 J	ND	ND			ND	ND	ND
XYLENES, TOTAL	5	5		ND	ND	ND		**6.4**	4.2	ND	ND	ND	ND			ND	ND	ND
NAPHTHALENE	10	10		ND	ND	ND		ND	ND	ND	0.33 J	ND	ND			ND	ND	ND
No Standard																		
CARBON DISULFIDE				ND	ND	0.94		ND	ND	ND	ND	ND	ND			ND	ND	ND
CYCLOHEXANE				ND	ND	ND		35	59	61	51	72	ND			ND	ND	ND
METHYL ISOBUTYL KETONE				ND	ND	ND		ND	13	ND	ND	ND	ND			ND	ND	ND
METHYLCYCLOHEXANE				ND	ND	0.47		3.2	17	15	11	ND	ND			ND	ND	ND
Total VOCs				**0**	**0**	**1.41**	**-**	**101.90**	**216.70**	**85.75**	**63.40**	**72.72**	**0**			**-**	**5.1**	**1.4**
Total BTEX				**0**	**0**	**0**	**-**	**62**	**83**	**6**	**1.4**	**0.7**	**0**			**0.0**	**0**	**0**
Non-Standard VOC List																		
1,3,5-TRIMETHYLBENZENE	5	5															ND	ND
1,2,4,5-TETRAMETHYLBENZENE	5	5															ND	ND
1,2,4-TRIMETHYLBENZENE	5	5															ND	ND
SEC-BUTYLBENZENE	5	5															ND	ND
N-PROPYLBENZENE	5	5															ND	ND
N-BUTYLBENZENE	5	5															ND	ND
P-ISOPROPYLTOLUENE																	ND	ND
1,4-DIETHYLBENZENE																	ND	ND

Notes:

Not Sampled

1) Blank space = analyte concentration not reported

2) BCP MW-2 was dry and not sampled

3) For the March 11, 2015 monitoring event well MW-1, MW-5, MW-6 and MW-7 were dry or not enough water was inside the well for a representative sample.

4) WG = groundwater

Table 1 - Groundwater Analytical Results
Summary of Detected Compounds
Former Mobil Station 99-MST 979 Main Street (1001 Main Street) Brownfield Cleanup

			Sample Name	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
			Date Collected	9/20/2013	3/19/2014	5/22/2014	3/11/2015	6/17/2015	8/3/2015	12/15/2015	1/27/2015	3/22/2016	6/3/2016	10/25/2016	12/8/2016	1/20/2017	5/17/2017	7/5/2017	11/2/2017
			Matrix	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NYSDEC Ambient Water Quality Standards & Guidance Values																			
Volatile Organic Compound	**Surface Water**	**Groundwater**																	
2-HEXANONE	50	50		ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	ND
ACETONE	50	50		ND	**98**	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**166**	ND
BENZENE	1	1		**6,600**	**4,500**	**4,700**	**3,700**	**4,300**	**4,100**	**2,100**	**2,200**	**1,900**	**3,100**	**1,390**	**635**	**363**	**451**	**3**	**364**
ETHYLBENZENE	5	5		**1,200**	**1,600**	**1,500**	**1,600**	**1,500**	**1,700**	**1,400**	**1,600**	**1,600**	**610**	**194**	**899**	**517**	**197**	2.4	**384**
ISOPROPYLBENZENE (CUMENE)	5	5		ND	**37**	ND	**32**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8.7**
METHYL ETHYL KETONE (2-BUTANONE)	50	50		ND	**71**	ND	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	**201**	**51.4**	**51.4**
METHYLENE CHLORIDE	5	5		ND	ND	ND	ND	ND	ND	ND	ND	ND	**35**	ND	ND	ND	ND	ND	ND
TOLUENE	5	5		**110**	**150**	**150**	**110**	**110**	**130**	**100**	**110**	**110**	**67**	**39.4**	**74.5**	**38.4**	**22.6**	1.6	**34.8**
1,1,2-TRICHLOROETHANE	1	1		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XYLENES, TOTAL	5	5		**3,700**	**3,600**	**3,200**	**4200**	**4000**	**3900**	**2200**	**2600**	**2200**	**2100**	**806.3**	**1430**	**949**	**639**	**7.1**	**930.0**
NAPHTHALENE	10	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**14**	**357**
No Standard																			
CARBON DISULFIDE				ND	ND	ND	0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANE				120	320	270	390	330	210	100	93	110	170	ND	ND	ND	ND	ND	60.5
METHYL ISOBUTYL KETONE				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE				ND	130	150	120	160	96	34	33	36 J	170	47.7	ND	ND	29.5	ND	33.4
Total VOCs				**11,730**	**10,506**	**9,970**	**10,179**	**10,400**	**10,136**	**5,934**	**6,636**	**5,920**	**6,252**	**2,477**	**3,038**	**1,867**	**1,540**	**254**	**2,224**
Total BTEX				**11,610**	**9,850**	**9,550**	**9,610**	**9,910**	**9,830**	**5,800**	**6,510**	**5,810**	**5,877**	**2,430**	**3,038**	**1,867**	**1,310**	**14**	**1,713**
Non-Standard VOC List																			
1,3,5-TRIMETHYLBENZENE	5	5																ND	**133**
1,2,4,5-TETRAMETHYLBENZENE	5	5																ND	ND
1,2,4-TRIMETHYLBENZENE	5	5																4.9	**737**
SEC-BUTYLBENZENE	5	5																ND	ND
N-PROPYLBENZENE	5	5																ND	ND
N-BUTYLBENZENE	5	5																ND	ND
P-ISOPROPYLTOLUENE																		ND	ND
1,4-DIETHYLBENZENE																		ND	ND

Notes:

Not Sampled

1) Blank space = analyte concentration not reported

2) BCP MW-2 was dry and not sampled

3) For the March 11, 2015 monitoring event well MW-1, MW-5, MW-6 and MW-7 were dry or not enough water was inside the well for a representative sample.

4) WG = groundwater

Table 1 - Groundwater Analytical Results
Summary of Detected Compounds
Former Mobil Station 99-MST 979 Main Street (1001 Main Street) Brownfield Cleanup

			Sample Name	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
			Date Collected	9/20/2013	3/19/2014	5/22/2014	3/11/2015	6/17/2015	8/3/2015	12/15/2015	1/27/2016	3/22/2016	6/3/2016	10/25/2016	12/8/2016	1/20/2017	5/17/2017	7/5/2017	11/17/2017
			Matrix	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NYSDEC Ambient Water Quality Standards & Guidance Values																			
Volatile Organic Compound	**Surface Water**	**Groundwater**																	
2-HEXANONE	50	50		ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACETONE	50	50		10	**250**	**170**	**67**	ND	**210**	ND	ND	ND	ND	ND	ND	ND	ND	38.2	10
BENZENE	1	1		**42**	**29**	**15**	**26**	**24**	**242**	ND	**21**	ND	**21**	**9.57**	**12.8**	**10.2**	**10.8**	**1.3**	**97.0**
ETHYLBENZENE	5	5		4.7	**34**	**32**	**560**	**1,000**	**680**	**1,100**	**1300**	**1,400**	**1400**	**1,000**	**1170**	**1,300**	**1220**	**28**	**1.8**
ISOPROPYLBENZENE (CUMENE)	5	5		ND	ND	ND	**9.8**	**15.0**	**26**	ND	ND	ND	ND	**19**	**30.3**	**28.7**	ND	2.3	ND
METHYL ETHYL KETONE (2-BUTANONE)	50	50		ND	ND	ND	ND	8.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	ND
METHYLENE CHLORIDE	5	5		ND	ND	1 J	ND	ND	ND	ND	**52**	ND	**42**	ND	ND	ND	ND	ND	ND
TOLUENE	5	5		1.1	**190**	**110**	**53**	**57**	**140**	**180**	**270**	**150**	**97**	**62.4**	**130**	**133**	**92.2**	**9.8**	ND
1,1,2-TRICHLOROETHANE	1	1		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XYLENES, TOTAL	5	5		**29**	**180**	**160**	**800**	**1,200**	**3100**	**1,800**	**2600**	**2,100**	**1800**	**1,160**	**1892**	**1,944**	**1289.7**	**24.5**	ND
NAPHTHALENE	10	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
No Standard																			
CARBON DISULFIDE				ND	ND	1.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANE				8.2	11	7	170	170	110	160	220	250	340	189	259	276	235	276	5.5
METHYL ISOBUTYL KETONE				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE				7.5	3.7	3.1	87	92	69	86	100	110	140	85.1	110	123	99.7	123	2.4
Total VOCs				**102.5**	**697.7**	**497.1**	**1,774.5**	**2,566.5**	**4,577.0**	**3,326.0**	**4,563.0**	**4,010.0**	**3,840.0**	**2,525.5**	**3,604.1**	**3,814.9**	**2,947.4**	**511.9**	**116.7**
Total BTEX				**76.8**	**433**	**317**	**1,439**	**2,281**	**4,162**	**3,080**	**4,191**	**3,650**	**3,318**	**2,232**	**3,205**	**3,387**	**2,613**	**64**	**99**
Non-Standard VOC List																			
1,3,5-TRIMETHYLBENZENE	5	5																2	ND
1,2,4,5-TETRAMETHYLBENZENE	5	5																1.1	ND
1,2,4-TRIMETHYLBENZENE	5	5																1.1	ND
SEC-BUTYLBENZENE	5	5																ND	ND
N-PROPYLBENZENE	5	5																2.3	ND
N-BUTYLBENZENE	5	5																1.7	ND
P-ISOPROPYLTOLUENE																		ND	ND
1,4-DIETHYLBENZENE																		ND	ND

Notes:

Not Sampled

1) Blank space = analyte concentration not reported

2) BCP MW-2 was dry and not sampled

3) For the March 11, 2015 monitoring event well MW-1, MW-5, MW-6 and MW-7 were dry or not enough water was inside the well for a representative sample.

4) WG = groundwater

Table 1 - Groundwater Analytical Results
Summary of Detected Compounds
Former Mobil Station 99-MST 979 Main Street (1001 Main Street) Brownfield Cleanup

			Sample Name	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
			Date Collected	9/20/2013	3/19/2014	5/22/2014	3/11/2015	6/17/2015	8/3/2015	12/15/2015	1/27/2016	3/22/2016	6/3/2016	10/25/2016	12/8/2016	1/20/2017	5/17/2017	7/5/2017	11/2/2017
			Matrix	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NYSDEC Ambient Water Quality Standards & Guidance Values																			
Volatile Organic Compound	**Surface Water**	**Groundwater**																	
2-HEXANONE	50	50		11	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACETONE	50	50		ND	**520**	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.3	ND
BENZENE	1	1		**5,600**	**4,800**	**4,900**		**3,700**	**4,100**	**1,800**	**1,800**	**1,700**	**1,600**	**899**	**949**	**682**	**428**	**574**	**283**
ETHYLBENZENE	5	5		**1,900**	**1,600**	**1,600**		**2,800**	**2,600**	**1,600**	**1,900**	**2,200**	**2,200**	**1,490**	**1,450**	**2,070**	**584**	**534**	**1,660**
ISOPROPYLBENZENE (CUMENE)	5	5		**28**	**29**	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**13.6**	ND
METHYL ETHYL KETONE (2-BUTANONE)	50	50		10	**350**	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	ND
METHYLENE CHLORIDE	5	5		ND	ND	ND		ND	ND	ND	ND	**77**	**96**	ND	ND	ND	ND	ND	ND
TOLUENE	5	5		**170**	**220**	**310**		**290**	**290**	**70**	**80**	**88**	**77**	**68.5**	**84.9**	**86.6**	ND	**36.2**	**82.0**
1,1,2-TRICHLOROETHANE	1	1		ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XYLENES, TOTAL	5	5		**10,000**	**6,800**	**8,300**		**9,100**	**10,000**	**2,600**	**3,100**	**3,300**	**2,800**	**2,271.3**	**2,152.2**	**3,394.7**	**3,000.7**	**4,520.0**	**5,610.0**
NAPHTHALENE	10	10		ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**730**	**1,030**
No Standard																			
CARBON DISULFIDE				ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
CYCLOHEXANE				230	340	240		430	260	230	250	280	430	198	148	257	ND	257	238
METHYL ISOBUTYL KETONE				23	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE				100	170	150		190	130	92	100	100	140	67.5	58.4	92.8	49	92.8	106
Total VOCs				**18,072**	**14,829**	**15,500**	**-**	**16,510**	**17,380**	**6,392**	**7,230**	**7,745**	**7,343**	**4,994**	**4,843**	**6,583**	**4,062**	**6,780**	**9,009**
Total BTEX				**17,670**	**13,420**	**15,110**	**-**	**15,890**	**16,990**	**6,070**	**6,880**	**7,288**	**6,677**	**4,729**	**4,636**	**6,233**	**4,013**	**5,664**	**7,635**
Non-Standard VOC List																			
1,3,5-TRIMETHYLBENZENE	5	5																**823**	ND
1,2,4,5-TETRAMETHYLBENZENE	5	5																**135**	ND
1,2,4-TRIMETHYLBENZENE	5	5																**2,280**	**2,490**
SEC-BUTYLBENZENE	5	5																3.2	ND
N-PROPYLBENZENE	5	5																**34.8**	ND
N-BUTYLBENZENE	5	5																**43.3**	ND
P-ISOPROPYLTOLUENE																		5.7	ND
1,4-DIETHYLBENZENE																		347	ND

Notes:

Not Sampled

1) Blank space = analyte concentration not reported

2) BCP MW-2 was dry and not sampled

3) For the March 11, 2015 monitoring event well MW-1, MW-5, MW-6 and MW-7 were dry or not enough water was inside the well for a representative sample.

4) WG = groundwater

Table 1 - Groundwater Analytical Results
Summary of Detected Compounds
Former Mobil Station 99-MST 979 Main Street (1001 Main Street) Brownfield Cleanup

			Sample Name	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
			Date Collected	9/20/2013	3/19/2014	5/22/2014	3/11/2015	6/17/2015	8/3/2015	12/14/2015	1/27/2016	3/22/2016	6/3/2016	10/25/2016	12/8/2016	1/20/2017	5/17/2017	7/5/2017	11/2/2017
			Matrix	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NYSDEC Ambient Water Quality Standards & Guidance Values																			
Volatile Organic Compound	**Surface Water**	**Groundwater**																	
2-HEXANONE	50	50		ND	ND	ND		190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACETONE	50	50		ND	ND	ND		480	340	ND	ND	ND	ND	ND	ND	ND	ND	**102**	ND
BENZENE	1	1		**190**	**33**	**16**		**470**	**890**	**250**	**230**	**200**	**120**	**302**	**168**	**200**	**113**	**131**	**774**
ETHYLBENZENE	5	5		**130**	**20**	**31**		**36**	**210**	**22**	**44**	**67**	**50**	**163**	**169**	**173**	**175**	**85.5**	**154.0**
ISOPROPYLBENZENE (CUMENE)	5	5		4.4	ND	1.9 J			ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
METHYL ETHYL KETONE (2-BUTANONE)	50	50		ND	ND	ND		110	ND	ND	ND	ND	ND	ND	ND	ND	ND	**19.6**	ND
METHYLENE CHLORIDE	5	5		ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	5	5		**810**	**42**	**79**		**1,000**	**1,900**	**85**	**120**	**78**	**120**	**130**	**255**	**351**	**147**	**22.5**	**2,970.0**
1,1,2-TRICHLOROETHANE	1	1		ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XYLENES, TOTAL	5	5		**750**	**85**	**150**		**740**	**1,100**	**140**	**190**	**130**	**210**	**393**	**360**	**451**	**190.7**	**438**	**1,500**
NAPHTHALENE	10	10		ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**86.6**	ND
No Standard																			
CARBON DISULFIDE				ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANE				68	ND	130		270	41	62	110	110	91	81.5	ND	ND	ND	ND	84
METHYL ISOBUTYL KETONE				ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHYLCYCLOHEXANE				46	16	18		170	27	24	21	10	24	32.2	30.2	36.9	35.3	36.9	44
Total VOCs				**1,998.4**	**196**	**424**	**-**	**3,466**	**4,508**	**583**	**715**	**595**	**615**	**1,101**	**983**	**1,212**	**661**	**925**	**5,526**
Total BTEX				**1,880**	**180**	**276**	**-**	**2,246**	**4,100**	**497**	**584**	**475**	**500**	**988**	**952**	**1,175**	**626**	**677**	**5,398**
Non-Standard VOC List																			
1,3,5-TRIMETHYLBENZENE	5	5																**74.3**	ND
1,2,4,5-TETRAMETHYLBENZENE	5	5																**14.3**	ND
1,2,4-TRIMETHYLBENZENE	5	5																**134**	ND
SEC-BUTYLBENZENE	5	5																	
N-PROPYLBENZENE	5	5																**11.3**	ND
N-BUTYLBENZENE	5	5																4.6	ND
P-ISOPROPYLTOLUENE																		1.6	1.6
1,4-DIETHYLBENZENE																		32.9	32.9

Notes:

Not Sampled

1) Blank space = analyte concentration not reported

2) BCP MW-2 was dry and not sampled

3) For the March 11, 2015 monitoring event well MW-1, MW-5, MW-6 and MW-7 were dry or not enough water was inside the well for a representative sample.

4) WG = groundwater

Table 1 - Groundwater Analytical Results
Summary of Detected Compounds
Former Mobil Station 99-MST 979 Main Street (1001 Main Street) Brownfield Cleanup

			Sample Name	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
			Date Collected	9/20/2013	3/19/2014	5/22/2014	3/11/2015	6/17/2015	8/3/2015	12/15/2015	3/22/2016	6/3/2016	10/25/2016	12/8/2016	1/20/2017	5/17/2017	7/5/2017	11/2/2017
			Matrix	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NYSDEC Ambient Water Quality Standards & Guidance Values																			
Volatile Organic Compound	**Surface Water**	**Groundwater**																	
2-HEXANONE	50	50		ND	ND	4.8		ND	ND	ND	ND	ND	ND			ND	ND	ND	
ACETONE	50	50		ND	3	ND		ND	ND	ND	ND	ND	ND			ND	ND	ND	
BENZENE	1	1		0.51	**8.8**	**14**		ND	ND	ND	ND	ND	ND			ND	**2.3**	**2.81**	
ETHYLBENZENE	5	5		ND	ND	3		ND	ND	ND	ND	ND	ND			ND	ND	0	
ISOPROPYLBENZENE (CUMENE)	5	5		ND	ND	ND		ND	ND	ND	ND	ND	ND			ND	ND	0.45	
METHYL ETHYL KETONE (2-BUTANONE)	50	50		ND	ND	ND		ND	ND	ND	ND	ND	ND			ND	ND	ND	
METHYLENE CHLORIDE	5	5		ND	ND	ND		ND	ND	ND	ND	ND	ND			ND	ND	ND	
TOLUENE	5	5		ND	0.56	4.7		ND	ND	ND	ND	ND	ND			ND	ND	1.1	
1,1,2-TRICHLOROETHANE	1	1																	
XYLENES, TOTAL	5	5		0.96	4.8	**94**		ND	ND	ND	0.99 J	ND	ND			ND	ND	ND	
NAPHTHALENE	10	10																	
No Standard																			
CARBON DISULFIDE				ND	ND	0.97		ND	ND	ND	ND	ND	ND			ND	ND	ND	
CYCLOHEXANE				ND	4.3	9.6		ND	ND	0.71	ND	ND	ND			ND	ND	0.99	
METHYL ISOBUTYL KETONE				ND	ND	ND		ND	ND	ND	ND	ND	ND			ND	ND	ND	
METHYLCYCLOHEXANE				ND	1.7	5.1		0.18	ND	ND	ND	ND	ND			ND	ND	ND	
Total VOCs				**1.47**	**23.16**	**136.17**	**-**	**0.18**	**-**	**0.71**	**-**	**-**	**-**	**-**	**-**	**-**	**2.30**	**5.35**	
Total BTEX				**0.51**	**14.16**	**115.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2.3**	**3.9**	
Non-Standard VOC List																			
1,3,5-TRIMETHYLBENZENE	5	5															ND	ND	
1,2,4,5-TETRAMETHYLBENZENE	5	5															ND	ND	
1,2,4-TRIMETHYLBENZENE	5	5															ND	ND	
SEC-BUTYLBENZENE	5	5																	
N-PROPYLBENZENE	5	5																	
N-BUTYLBENZENE	5	5																	
P-ISOPROPYLTOLUENE																			
1,4-DIETHYLBENZENE																			

Notes:

Not Sampled

1) Blank space = analyte concentration not reported

2) BCP MW-2 was dry and not sampled

3) For the March 11, 2015 monitoring event well MW-1, MW-5, MW-6 and MW-7 were dry or not enough water was inside the well for a representative sample.

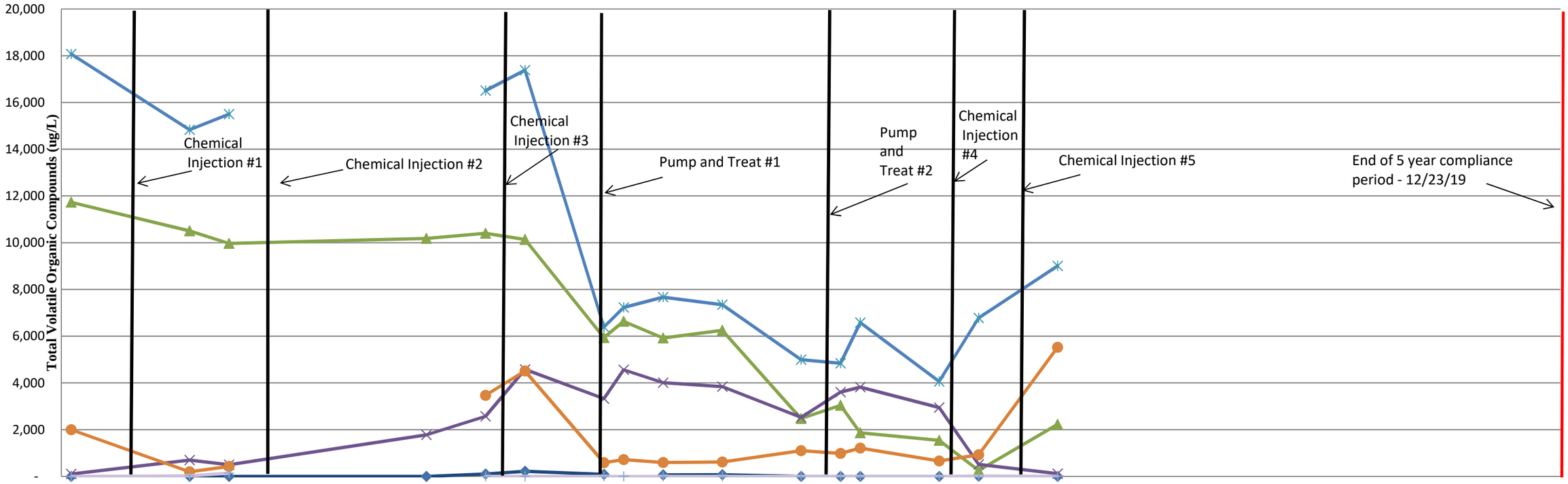
4) WG = groundwater

GRAPHS

Former Mobil Station 99-MST 979 Main Street (1001 Main Street)
Conventus Groundwater Remediation

Graph 1

GROUNDWATER TREATMENT MONITORING - TOTAL VOC

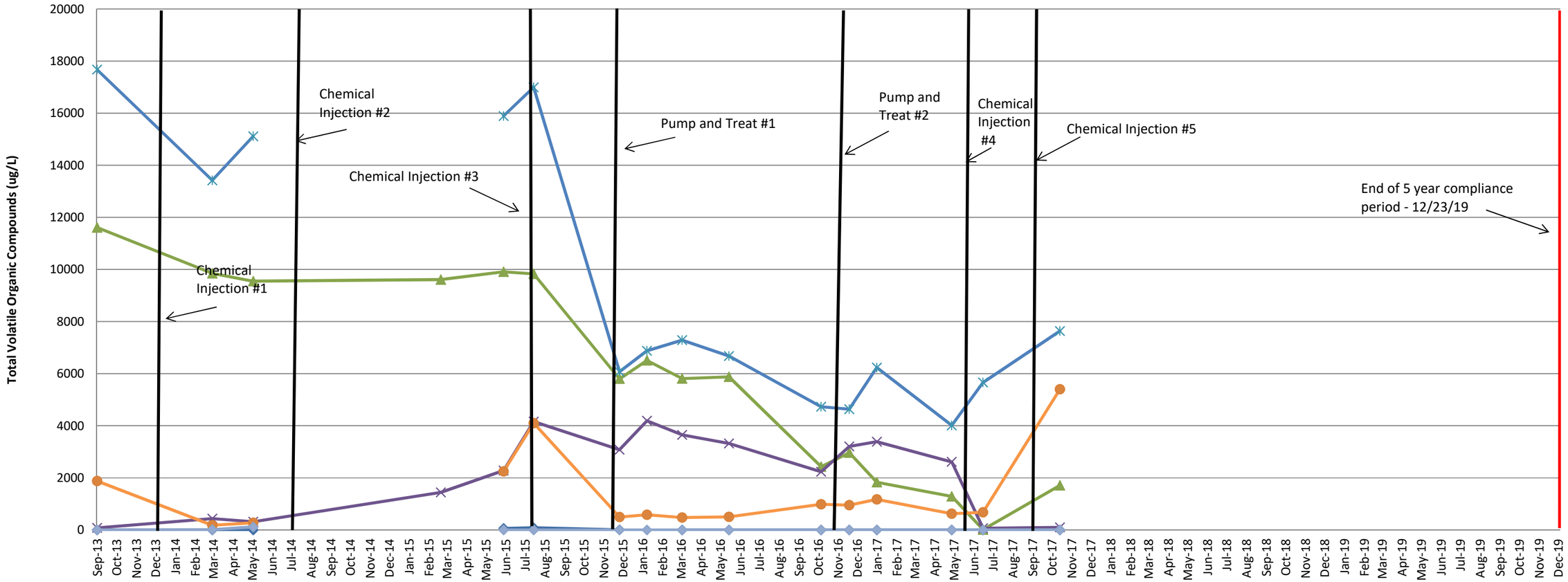


	9/20/2013	3/19/2014	5/22/2014	3/11/2015	6/17/2015	8/3/2015	12/15/2015	1/27/2016	3/22/2016	6/3/2016	10/25/2016	12/8/2016	1/20/2017	5/17/2017	7/5/2017	11/2/2017
BCP MW-1	-	-	1.41	-	101.9	216.7	85.75		63.4	72.72	-	-	-	-	5	1.4
BCP MW-2																
BCP MW-3	11,730	10,506	9,970	10,179.01	10,400	10,136	5,934	6,636	5,920	6,252	2,477	3,038	1,867	1,540	254	2,224
BCP MW-4	102.5	697.7	497.1	1,774.5	2,566.50	4,577	3,326	4,563	4,010	3,840	2,526	3,604	3,815	2,947.4	511.9	116.7
BCP MW-5	18,072	14,829	15,500		16,510	17,380	6,392	7,230	7,668	7,343	4,994	4,843	6,583	4,064	6,780	9,009
BCP MW-6	1,998.4	196	424		3,466	4,508	583	715	595	615	1,101	983	1,212	661	925	5,526
BCP MW-7	1.47	23.16	136.17		0.18	-	0.71	-	-	-	-	-	-	-	2.3	5.35

Former Mobil Station 99-MST 979 Main Street (1001 Main Street)
Conventus Groundwater Remediation

Graph 2

GROUNDWATER TREATMENT MONITORING - TOTAL BTEX



	9/20/2013	3/19/2014	5/22/2014	3/11/2015	6/17/2015	8/3/2015	12/15/2015	1/27/2016	3/22/2016	6/3/2016	10/25/2016	12/8/2016	1/20/2017	5/17/2017	7/5/2017	11/2/2017
BCP MW-1	0	0	0		62	83	6.25		1	1	-	-	-	-	-	-
BCP MW-2																
BCP MW-3	11,610	9,850	9,550	9,610	9,910	9,830	5,800	6,510	5,810	5,877	2,430	2,964	1,829	1,287	14	1,713
BCP MW-4	76.8	433	317	1,439	2,281	4,162	3,080	4,191	3,650	3,318	2,232	3,205	3,387	2,613	64	99
BCP MW-5	17,670	13,420	15,110		15,890	16,990	6,070	6,880	7,288	6,677	4,729	4,636	6,233	4,013	5,664	7,635
BCP MW-6	1,880	180	276		2,246	4,100	497	584	475	500	988	952	1,175	626	677	5,398
BCP MW-7	1	14.16	115.7		0	0	0	-	-	-	-	-	-	-	2.3	3.9

APPENDICES

APPENDIX A
MATERIAL SAFETY DATA SHEETS

RegenOx® Technical Description

Close up of RegenOx

RegenOx is an advanced chemical oxidation technology that destroys contaminants through powerful, yet controlled chemical reactions. This product maximizes *in situ* chemical oxidation (ISCO) performance through use of a two-part product system; a sodium percarbonate oxidizer complex activated by a patented surface catalyst system. The technology degrades pollutants through direct oxidation, as well as through the generation of a suite of free radical compounds which in turn oxidize recalcitrant contaminants. RegenOX rapidly and effectively destroys a range of target contaminants including petroleum hydrocarbons and chlorinated compounds.

RegenOx is especially effective in destroying target contaminants present in high concentration source areas within the saturated and vadose zones. For petroleum hydrocarbon treatment, RegenOx produces oxygen as a result of its reactions, providing seamless transition from ISCO to enhanced aerobic bioremediation. RegenOx produces minimal heat when applied, and continues to destroy contaminants for up to 30 days on a single application. RegenOx is safe for use in direct contact with underground utilities, since it is non-corrosive to concrete and most metals.

$$C_2Cl_4 + 4/3\ Na_2CO_3 \bullet 2H_2O_2 + 4NaOH \rightarrow 2CO_2 + 4NaCl + 4H_2O + 4/3\ Na_2CO_3$$

- Free Radical Oxidation via production of:
  - Perhydroxyl Radical ($HO_2\bullet$)
  - Hydroxyl Radical ($OH\bullet$)
  - Superoxide Radical ($O_2^{-}\bullet$)

For a list of treatable contaminants with the use of RegenOx, view the Range of Treatable Contaminants Guide

Chemical Composition – Part A Oxidant

- Sodium Percarbonate – CAS #15630-89-4
- Sodium Carbonate Monohydrate - CAS #5968-11-6
- Silicic Acid – CAS #7699-11-6
- Silica Gel – CAS #63231

Chemical Composition – Part B Activator Complex

- Silicic Acid, Sodium Salt, Sodium Silicate - CAS#1344-09-08
- Silica Gel – CAS #63231
- Ferrous Sulfate – CAS #7720-78-7
- Water – CAS#7732-18-5

Properties

- Bulk Density – Part A 0.9-1.2 g/cm3; Part B – 1.39 g/cm3
- pH - 10-11 per recommended mixing ratios (3-5% oxidant in solution)
- Solubility – Oxidant - 14.5 g/100 g water; Activator – miscible in water
- Appearance – Brown to orange-brown when mixed with water
- Odor – Not detectable
- Vapor Pressure – None
- Non-hazardous

RegenOx® Technical Description

Storage and Handling Guidelines

Storage
Store in a cool, dry place out of heat/direct sunlight
Store at temperatures not to exceed 40°C/104°F
Store in original tightly closed container
Store in a well-ventilated place
Do not store near combustible materials
Store away from incompatible materials
Protect from contamination
Provide appropriate exhaust ventilation in places where dust is formed

Handling
Minimize dust generation and accumulation
Observe good industrial hygiene practices
Keep away from clothing and combustible materials
Take any precaution to avoid mixing with combustibles
Avoid contact with eyes
Do not taste or swallow
Do not eat, drink or smoke nearby
Wear appropriate personal protective equipment
Wash hands thoroughly after handling
Avoid release to the environment

Applications

RegenOx is applied using direct-injection techniques or wells. The application process enables the two- part product to be combined, then pressure-injected into the zone of contamination and moved out into the aquifer media. Application instructions for this product are contained in the RegenOx Application Instructions Guide.

Health and Safety

Material is relatively safe to handle; however, we recommend avoiding contact with eyes, skin and clothing. OSHA Level D personal protection equipment including vinyl or rubber gloves, eye protection and dust mask are recommended when handling this product. Please review the Material Safety Data Sheet for additional storage, packaging, usage, and handling requirements here: RegenOx Part A SDS and RegenOx Part B SDS.

REGENESIS

www.regenesis.com
1011 Calle Sombra, San Clemente CA 92673
949.366.8000

RegenOx® – Part A (Oxidizer Complex)

Material Safety Data Sheet (MSDS)

Last Revised: September 27, 2013

Section 1 – Supplier Information and Material Identification

Supplier:

REGENESIS
1011 Calle Sombra
San Clemente, CA 92673
Telephone: 949.366.8000
Fax: 949.366.8090
E-mail: info@regenesis.com

Chemical Description:	A mixture of sodium percarbonate [$2Na_2CO_3 \cdot 3H_2O_2$], sodium carbonate [Na_2CO_3], sodium silicate and silica gel.
Chemical Family:	Inorganic Chemicals
Trade Name:	RegenOx® – Part A (Oxidizer Complex)
Product Use:	Used to remediate contaminated soil and groundwater (environmental applications)

Section 2 – Chemical Information/Other Designations

CAS No.	Chemical	Percentage
15630-89-4	Sodium Percarbonate	60 -100 %
7699-11-6	Silicic Acid	< 1 %
63231-67-4	Silica Gel	< 1 %

Section 3 – Physical Data

Form:	Powder
Color:	White
Odor:	Odorless
Melting Point:	NA
Boiling Point:	NA

Section 3 – Physical Data (cont)

Flammability/Flash Point:	NA
Vapor Pressure:	NA
Bulk Density:	0.9 – 1.2 g/cm^3
Solubility:	Min 14.5g/100g water @ 20 ºC
Viscosity:	NA
pH (3% solution):	≈ 10.5
Decomposition Temperature:	Self-accelerating decomposition with oxygen release starts at 50 ºC.

Section 4 – Reactivity Data

Stability:	Stable under normal conditions
Conditions to Avoid/Incompatibility:	Acids, bases, salts of heavy metals, reducing agents, and flammable substances
Hazardous Decomposition Products:	Oxygen. Contamination with many substances will cause decomposition. The rate of decomposition increases with increasing temperature and may be very vigorous with rapid generation of oxygen and steam.

Section 5 – Regulations

TSCA Inventory Listed:	Yes
CERCLA Hazardous Substance (40 CFR Part 302)	
Listed Substance:	*No*
Unlisted Substance:	*Yes*
SARA, Title III, Sections 313 (40 CFR Part 372) – Toxic Chemical Release Reporting: Community Right-To-Know	
Extremely Hazardous Substance:	No
WHMIS Classification:	C, D2B
Canadian Domestic Substance List:	Appears

Section 6 – Protective Measures, Storage and Handling

Technical Protective Measures

Storage:	Oxidizer. Store in a cool, well ventilated area away from all sources of ignition and out of the direct sunlight. Store in a dry location away from heat and in temperatures less than 40 °C.
	Keep away from incompatible materials and keep lids tightly closed. Do not store in improperly labeled containers.
	Protect from moisture. Do not store near combustible materials. Keep containers well sealed.
	Store separately from reducing materials. Avoid contamination which may lead to decomposition.
Handling:	Avoid contact with eyes, skin and clothing. Use with adequate ventilation.
	Do not swallow. Avoid breathing vapors, mists or dust. Do not eat, drink or smoke in the work area.
	Label containers and keep them tightly closed when not in use.
	Wash hands thoroughly after handling.

Personal Protective Equipment (PPE)

Engineering Controls:	General room ventilation is required if used indoors. Local exhaust ventilation, process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Avoid creating dust or mists. Maintain adequate ventilation at all times. Do not use in confined areas. Keep levels below recommended exposure limits. To determine actual exposure limits, monitoring should be performed on a routine basis.
Respiratory Protection:	For many conditions, no respiratory protection is necessary; however, in dusty or unknown conditions or when exposures exceed limit values a NIOSH approved respirator should be used.
Hand Protection:	Wear chemical resistant gloves (neoprene, rubber, or PVC).

Section 6 – Protective Measures, Storage and Handling (cont)

Eye Protection:	Wear chemical safety goggles. A full face shield may be worn in lieu of safety goggles.
Skin Protection:	Try to avoid skin contact with this product. Chemical resistant gloves (neoprene, PVC or rubber) and protective clothing should be worn during use.
Other:	Eye wash station.
Protection Against Fire & Explosion:	Product is non-explosive. In case of fire, evacuate all non-essential personnel, wear protective clothing and a self-contained breathing apparatus, stay upwind of fire, and use water to spray cool fire-exposed containers.

Section 7 – Hazards Identification

Potential Health Effects

Inhalation:	Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath, and irritations to mucous membranes, nose and throat.
Eye Contact:	Causes irritation, redness and pain.
Skin Contact:	Causes slight irritation.
Ingestion:	May be harmful if swallowed (vomiting and diarrhea).

Section 8 – Measures in Case of Accidents and Fire

After Spillage/Leakage:	Eliminate all ignition sources. Evacuate unprotected personnel and never exceed any occupational exposure limit. Shovel or sweep spilt material into plastic bags or vented containers for disposal. Do not return spilled or contaminated material to the inventory.
Extinguishing Media:	Water

First Aid

Eye Contact:	Flush eyes with running water for at least 15 minutes with eyelids held open. Seek a specialist.
Inhalation:	Remove affected person to fresh air. Seek medical attention if the effects persist.
Ingestion:	If the individual is conscious and not convulsing, give two-four cups of water to dilute the chemical and seek medical attention immediately. **Do Not** induce vomiting.

Section 8 – Measures in Case of Accidents and Fire (cont)

Skin Contact:	Wash affected areas with soap and a mild detergent and large amounts of water.

Section 9 – Accidental Release Measures

Precautions:	
Cleanup Methods:	Shovel or sweep spilt material into plastic bags or vented containers for disposal. Do not return spilled or contaminated material to the inventory.

Section 10 – Information on Toxicology

Toxicity Data	
LD50 Oral (rat):	2,400 mg/kg
LD50 Dermal (rabbit):	Min 2,000 mg/kg
LD50 Inhalation (rat):	Min 4,580 mg/kg

Section 11 – Information on Ecology

Ecology Data	
Ecotoxicological Information:	NA

Section 12 – Disposal Considerations

Waste Disposal Method	
Waste Treatment:	Dispose of in an approved waste facility operated by an authorized contactor in compliance with local regulations.
Package (Pail) Treatment:	The empty and clean containers are to be recycled or disposed of in conformity with local regulations.

Section 13 – Shipping/Transport Information

D.O.T. Shipping Name:	Oxidizing Solid, N.O.S. [A mixture of sodium percarbonate [$2Na_2CO_3 \cdot 3H2O_2$], sodium carbonate [Na_2CO_3], sodium silicate and silica gel.]
UN Number:	1479
Hazard Class:	5.1
Labels:	5.1 (Oxidizer)
Packaging Group:	III

Section 14 – Other Information

HMIS® Rating	Health – 1 (slight)	Reactivity – 1 (slight)
	Flammability – 0 (none)	Lab PPE – goggles, gloves, and lab coat

HMIS® is a registered trademark of the National Painting and Coating Association.

Section 15 – Further Information

The information contained in this document is the best available to the supplier at the time of writing, but is provided without warranty of any kind. Some possible hazards have been determined by analogy to similar classes of material. The items in this document are subject to change and clarification as more information become available. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose.

APPENDIX B

LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

Lab Number:	L1742555
Client:	C&S Companies 141 Elm Street, Suite 100 Buffalo, NY 14203
ATTN:	Cody Martin
Phone:	(716) 847-1630
Project Name:	(N46) CONVENTUS
Project Number:	N46.001.001
Report Date:	11/30/17

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: (N46) CONVENTUS
Project Number: N46.001.001

Lab Number: L1742555
Report Date: 11/30/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1742555-01	BCP-MW-4	WATER	CONVENTUS	11/17/17 11:50	11/17/17

Project Name: (N46) CONVENTUS
Project Number: N46.001.001

Lab Number: L1742555
Report Date: 11/30/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name: (N46) CONVENTUS
Project Number: N46.001.001
Lab Number: L1742555
Report Date: 11/30/17

Case Narrative (continued)

Report Submission

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

Volatile Organics

L1742555-01: The sample was collected in a pre-preserved vial; however, the pH of the sample was determined to be greater than two. Samples that have a pH of greater than two should be analyzed within 7 days of collection; therefore, the sample was analyzed with the method required holding time exceeded.

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

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 11/30/17

ORGANICS

VOLATILES

Project Name: (N46) CONVENTUS
Project Number: N46.001.001
Lab Number: L1742555
Report Date: 11/30/17

SAMPLE RESULTS

Lab ID: L1742555-01
Client ID: BCP-MW-4
Sample Location: CONVENTUS

Date Collected: 11/17/17 11:50
Date Received: 11/17/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/29/17 11:30
Analyst: BD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.0	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	0.20	J	ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	0.48	J	ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	97		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	1.8	J	ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: (N46) CONVENTUS **Lab Number:** L1742555

Project Number: N46.001.001 **Report Date:** 11/30/17

SAMPLE RESULTS

Lab ID: L1742555-01 Date Collected: 11/17/17 11:50

Client ID: BCP-MW-4 Date Received: 11/17/17

Sample Location: CONVENTUS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	10		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	0.74	J	ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	5.5	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	2.4	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	84		70-130

Project Name: (N46) CONVENTUS
Project Number: N46.001.001
Lab Number: L1742555
Report Date: 11/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/29/17 09:23
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1067184-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: (N46) CONVENTUS
Project Number: N46.001.001

Lab Number: L1742555
Report Date: 11/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/29/17 09:23
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1067184-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Tentatively Identified Compounds			
Total TIC Compounds	1.08	J	ug/l
Sulfur Dioxide	1.08	NJ	ug/l

Project Name: (N46) CONVENTUS
Project Number: N46.001.001

Lab Number: L1742555
Report Date: 11/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/29/17 09:23
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1067184-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: (N46) CONVENTUS

Project Number: N46.001.001

Lab Number: L1742555

Report Date: 11/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1067184-3 WG1067184-4								
Methylene chloride	92		90		70-130	2		20
1,1-Dichloroethane	95		95		70-130	0		20
Chloroform	90		90		70-130	0		20
Carbon tetrachloride	83		80		63-132	4		20
1,2-Dichloropropane	95		94		70-130	1		20
Dibromochloromethane	85		82		63-130	4		20
1,1,2-Trichloroethane	97		97		70-130	0		20
Tetrachloroethene	81		80		70-130	1		20
Chlorobenzene	92		90		75-130	2		20
Trichlorofluoromethane	93		91		62-150	2		20
1,2-Dichloroethane	94		92		70-130	2		20
1,1,1-Trichloroethane	88		86		67-130	2		20
Bromodichloromethane	86		85		67-130	1		20
trans-1,3-Dichloropropene	83		81		70-130	2		20
cis-1,3-Dichloropropene	80		78		70-130	3		20
Bromoform	84		82		54-136	2		20
1,1,2,2-Tetrachloroethane	100		98		67-130	2		20
Benzene	95		94		70-130	1		20
Toluene	95		94		70-130	1		20
Ethylbenzene	95		94		70-130	1		20
Chloromethane	110		110		64-130	0		20
Bromomethane	91		90		39-139	1		20
Vinyl chloride	120		120		55-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: (N46) CONVENTUS

Project Number: N46.001.001

Lab Number: L1742555

Report Date: 11/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1067184-3 WG1067184-4								
Chloroethane	120		110		55-138	9		20
1,1-Dichloroethene	99		98		61-145	1		20
trans-1,2-Dichloroethene	91		90		70-130	1		20
Trichloroethene	87		89		70-130	2		20
1,2-Dichlorobenzene	92		89		70-130	3		20
1,3-Dichlorobenzene	92		90		70-130	2		20
1,4-Dichlorobenzene	89		87		70-130	2		20
Methyl tert butyl ether	98		91		63-130	7		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	90		90		70-130	0		20
cis-1,2-Dichloroethene	88		91		70-130	3		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	100		99		36-147	1		20
Acetone	83		80		58-148	4		20
Carbon disulfide	97		96		51-130	1		20
2-Butanone	82		87		63-138	6		20
4-Methyl-2-pentanone	85		85		59-130	0		20
2-Hexanone	65		62		57-130	5		20
Bromochloromethane	90		90		70-130	0		20
1,2-Dibromoethane	94		92		70-130	2		20
1,2-Dibromo-3-chloropropane	76		71		41-144	7		20
Isopropylbenzene	86		85		70-130	1		20
1,2,3-Trichlorobenzene	91		73		70-130	**22**	Q	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: (N46) CONVENTUS

Project Number: N46.001.001

Lab Number: L1742555

Report Date: 11/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1067184-3 WG1067184-4								
1,2,4-Trichlorobenzene	84		76		70-130	10		20
Methyl Acetate	88		85		70-130	3		20
Cyclohexane	93		93		70-130	0		20
1,4-Dioxane	110		100		56-162	10		20
Freon-113	100		99		70-130	1		20
Methyl cyclohexane	87		88		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		99		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	107		107		70-130
Dibromofluoromethane	94		93		70-130

Project Name: (N46) CONVENTUS
Project Number: N46.001.001

Lab Number: L1742555
Report Date: 11/30/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1742555-01A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L1742555-01B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L1742555-01C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	(N46) CONVENTUS	**Lab Number:**	L1742555
Project Number:	N46.001.001	**Report Date:**	11/30/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	(N46) CONVENTUS	**Lab Number:**	L1742555
Project Number:	N46.001.001	**Report Date:**	11/30/17

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	(N46) CONVENTUS	**Lab Number:**	L1742555
Project Number:	N46.001.001	**Report Date:**	11/30/17

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624:
EPA 8260C:
EPA 8270D:
EPA 300:
EPA 6860:
EPA 9010:
EPA 9012B:
EPA 9050A:
SM3500:
SM4500
SM5310C:

Mansfield Facility
SM 2540D:
EPA 3005A
EPA 8082A:
EPA TO-15:
Biological Tissue Matrix:

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

Westborough Facility:

Drinking Water
EPA 300.0 **EPA 353.2** **SM4500NO3-F** **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332 **EPA 524.2:** **EPA 504.1:**
Microbiology **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH **EPA 350.1** **LACHAT 10-107-06-1-B** **SM4500NO3-F, EPA 353.2** **, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624
EPA 608
EPA 625 **EPA 600/4-81-045**
Microbiology **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: **EPA 200.8:** **EPA 245.1**

Non-Potable Water
EPA 200.7:
EPA 200.8:
EPA 245.1
SM2340B

ALPHA ANALYTICAL

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193
Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page of

Date Rec'd in Lab: 11/18/17

ALPHA Job #: L1742555

Client Information
Client: C&S Engineers, Inc.
Address: 141 Elm Street Suite 100
Phone: (716) 847-1630
Fax: (716) 847-1454
Email: cmartin@cscos.com

Project Information
Project Name: (N46) Conventus
Project Location: Conventus
Project # N46.001.001
(Use Project name as Project #) ☐
Project Manager: Cody Martin (please verify w/ Cody Martin)
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☒ Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☒ Other TCL VOCs
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS
TCL VOCs

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs	Sample Specific Comments
42555-01	BCP-MW-4	11/17/17	11:50 am	GW	AS	X	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	V								
Preservative	B								

Relinquished By:	Date/Time	Received By:	Date/Time
Ana Sayn	11/17/17 4:31 pm	Eric Snyder AHC	11/17/17 16:30
Eric Snyder AHC	11/17/17 1631		11/18/17 0100

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
08-Nov-17 15:45

Laboratory Report
SC41135

C&S Engineers, Inc.
141 Elm Street
Suite 100
Buffalo, NY 14203

Project: Conventus - 1001 Main Street, NY
Project #: N46.001.001

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2972/2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00348
USDA # P330-15-00375
Vermont # VT-11393

Authorized by:

Kimberly Laplante
Quality Assurance Manager

Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 35 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our 'Quality' web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC41135

Project: Conventus - 1001 Main Street, NY

Project Number: N46.001.001

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC41135-01	BCP-MW-6	Ground Water	02-Nov-17 10:50	04-Nov-17 10:20
SC41135-02	BCP-MW-1	Ground Water	02-Nov-17 11:35	04-Nov-17 10:20
SC41135-03	BCP-MW-7	Ground Water	02-Nov-17 12:25	04-Nov-17 10:20
SC41135-04	BCP-MW-3	Ground Water	02-Nov-17 13:50	04-Nov-17 10:20
SC41135-05	BCP-MW-5	Ground Water	02-Nov-17 14:45	04-Nov-17 10:20
SC41135-06	Trip Blank	Aqueous	02-Nov-17 00:00	04-Nov-17 10:20

CASE NARRATIVE:

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 2.6 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW846 8260C

Calibration:

1710027

Analyte quantified by quadratic equation type calibration.

1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,3,5-Trimethylbenzene
1,3-Dichlorobenzene
Bromoform
cis-1,3-Dichloropropene
Ethylbenzene
Naphthalene
Styrene
trans-1,3-Dichloropropene

This affected the following samples:

1718835-BLK1
1718835-BLK2
1718835-BS1
1718835-BS2
1718835-BSD1
1718835-BSD2
1718908-BLK1
1718908-BS1
1718908-BS2
1718908-BSD1
1718908-BSD2
BCP-MW-1
BCP-MW-3
BCP-MW-5
BCP-MW-6
BCP-MW-7
S709132-ICV1
S709835-CCV1
S709877-CCV1
Trip Blank

Laboratory Control Samples:

1718835 BS/BSD

SW846 8260C

Laboratory Control Samples:

1718835 BS/BSD

1,1,2-Trichlorotrifluoroethane (Freon 113) percent recoveries (123/135) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bia

BCP-MW-1
BCP-MW-5
BCP-MW-6
BCP-MW-7
Trip Blank

Bromomethane percent recoveries (65/82) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

BCP-MW-1
BCP-MW-5
BCP-MW-6
BCP-MW-7
Trip Blank

Methyl acetate percent recoveries (157/163) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

BCP-MW-1
BCP-MW-5
BCP-MW-6
BCP-MW-7
Trip Blank

Methyl acetate percent recoveries (64/93) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

BCP-MW-1
BCP-MW-5
BCP-MW-6
BCP-MW-7
Trip Blank

Methylene chloride percent recoveries (126/133) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

BCP-MW-1
BCP-MW-5
BCP-MW-6
BCP-MW-7
Trip Blank

1718835 BSD

Bromomethane RPD 23% (20%) is outside individual acceptance criteria.

Carbon disulfide RPD 28% (20%) is outside individual acceptance criteria.

Methyl acetate RPD 38% (30%) is outside individual acceptance criteria.

Methylene chloride RPD 27% (20%) is outside individual acceptance criteria.

1718835-BS1

SW846 8260C

Laboratory Control Samples:

1718835-BS1

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

1,2,4-Trichlorobenzene
Methyl acetate

1718835-BS2

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

1,2,4-Trichlorobenzene
Methyl acetate

1718835-BSD1

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

1,2,4-Trichlorobenzene
Methyl acetate

1718835-BSD2

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

1,2,4-Trichlorobenzene
Methyl acetate

1718908 BS/BSD

1,1-Dichloroethene percent recoveries (130/135) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

BCP-MW-3

Methyl acetate percent recoveries (263/278) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

BCP-MW-3

Samples:

S709835-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,1-Trichloroethane (21.1%)
Bromomethane (-24.1%)
Carbon tetrachloride (27.4%)
Methyl acetate (-36.5%)
Methylcyclohexane (20.7%)
Tetrachloroethene (23.4%)
Trichlorofluoromethane (Freon 11) (24.8%)

SW846 8260C

Samples:

S709835-CCV1

This affected the following samples:

1718835-BLK1
1718835-BLK2
1718835-BS1
1718835-BS2
1718835-BSD1
1718835-BSD2
BCP-MW-1
BCP-MW-5
BCP-MW-6
BCP-MW-7
Trip Blank

S709877-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,2-Trichlorotrifluoroethane (Freon 113) (25.3%)
1,1-Dichloroethene (30.4%)
Bromomethane (-28.9%)
Carbon disulfide (20.8%)
Methylene chloride (24.2%)

This affected the following samples:

1718908-BLK1
1718908-BS1
1718908-BS2
1718908-BSD1
1718908-BSD2
BCP-MW-3

SC41135-01 *BCP-MW-6*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC41135-02 *BCP-MW-1*

Non-target concentration sufficient to be reported as one of the highest TICs.

Tert-Butanol / butyl alcohol

SC41135-03 *BCP-MW-7*

Non-target concentration sufficient to be reported as one of the highest TICs.

Tert-Butanol / butyl alcohol

SC41135-04 *BCP-MW-3*

Non-target concentration sufficient to be reported as one of the highest TICs.

1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Naphthalene

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC41135-05 *BCP-MW-5*

SW846 8260C

Samples:

SC41135-05 *BCP-MW-5*

Non-target concentration sufficient to be reported as one of the highest TICs.

1,2,4-Trimethylbenzene
Naphthalene

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SW846 8260C TICs

Samples:

SC41135-02 *BCP-MW-1*

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

SC41135-04 *BCP-MW-3*

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

SC41135-05 *BCP-MW-5*

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

Sample Acceptance Check Form

Client:	C&S Engineers, Inc. - Buffalo, NY
Project:	Conventus - 1001 Main Street, NY / N46.001.001
Work Order:	SC41135
Sample(s) received on:	11/4/2017

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
Were custody seals present?	☑	☐	☐
Were custody seals intact?	☑	☐	☐
Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
Were samples cooled on ice upon transfer to laboratory representative?	☑	☐	☐
Were sample containers received intact?	☑	☐	☐
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
Were samples accompanied by a Chain of Custody document?	☑	☐	☐
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☐	☑	☐
Did sample container labels agree with Chain of Custody document?	☑	☐	☐
Were samples received within method-specific holding times?	☑	☐	☐

Summary of Hits

Lab ID: SC41135-01 **Client ID:** BCP-MW-6

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Benzene	774	D	50.0	µg/l	SW846 8260C
Cyclohexane	84.0	J, D	250	µg/l	SW846 8260C
Ethylbenzene	154	D	50.0	µg/l	SW846 8260C
Methylcyclohexane	44.0	J, D	250	µg/l	SW846 8260C
Toluene	2970	D	50.0	µg/l	SW846 8260C
Total Xylenes	1500	D	150	µg/l	SW846 8260C

Lab ID: SC41135-02 **Client ID:** BCP-MW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Benzene	0.33	J	1.00	µg/l	SW846 8260C
Ethylbenzene	0.40	J	1.00	µg/l	SW846 8260C
Tert-Butanol / butyl alcohol	15.6	NonTR	10.0	µg/l	SW846 8260C
Toluene	1.10		1.00	µg/l	SW846 8260C

Lab ID: SC41135-03 **Client ID:** BCP-MW-7

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Benzene	2.81		1.00	µg/l	SW846 8260C
Cyclohexane	0.99	J	5.00	µg/l	SW846 8260C
Ethylbenzene	0.45	J	1.00	µg/l	SW846 8260C
Isopropylbenzene	0.38	J	1.00	µg/l	SW846 8260C
Tert-Butanol / butyl alcohol	37.6	NonTR	10.0	µg/l	SW846 8260C
Toluene	0.61	J	1.00	µg/l	SW846 8260C

Lab ID: SC41135-04 **Client ID:** BCP-MW-3

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,2,4-Trimethylbenzene	737	NonTR	10.0	µg/l	SW846 8260C
1,3,5-Trimethylbenzene	133	NonTR	10.0	µg/l	SW846 8260C
Benzene	364	D	10.0	µg/l	SW846 8260C
Cyclohexane	60.5	D	50.0	µg/l	SW846 8260C
Ethylbenzene	384	D	10.0	µg/l	SW846 8260C
Isopropylbenzene	8.70	J, D	10.0	µg/l	SW846 8260C
Methyl acetate	31.9	J, D	50.0	µg/l	SW846 8260C
Methylcyclohexane	33.4	J, D	50.0	µg/l	SW846 8260C
Naphthalene	357	NonTR	10.0	µg/l	SW846 8260C
Toluene	34.8	D	10.0	µg/l	SW846 8260C
Total Xylenes	930	D	30.0	µg/l	SW846 8260C

Lab ID: SC41135-05 **Client ID:** BCP-MW-5

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,2,4-Trimethylbenzene	2490	NonTR	100	µg/l	SW846 8260C
Benzene	283	D	100	µg/l	SW846 8260C
Cyclohexane	238	J, D	500	µg/l	SW846 8260C
Ethylbenzene	1660	D	100	µg/l	SW846 8260C
Methylcyclohexane	106	J, D	500	µg/l	SW846 8260C
Naphthalene	1030	NonTR	100	µg/l	SW846 8260C
Toluene	82.0	J, D	100	µg/l	SW846 8260C
Total Xylenes	5610	D	300	µg/l	SW846 8260C

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
BCP-MW-6	N46.001.001	Ground Water	02-Nov-17 10:50	04-Nov-17
SC41135-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS			GS1										
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 50.0	U, D	µg/l	50.0	26.6	50	SW846 8260C	07-Nov-17	07-Nov-17	GMA	1718835	X
67-64-1	Acetone	< 500	U, D	µg/l	500	40.2	50	"	"	"	"	"	X
71-43-2	Benzene	**774**	D	µg/l	50.0	14.2	50	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 25.0	U, D	µg/l	25.0	20.8	50	"	"	"	"	"	X
75-25-2	Bromoform	< 50.0	U, D	µg/l	50.0	21.2	50	"	"	"	"	"	X
74-83-9	Bromomethane	< 100	U, D	µg/l	100	44.8	50	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 100	U, D	µg/l	100	53.5	50	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 100	U, D	µg/l	100	20.6	50	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 50.0	U, D	µg/l	50.0	21.8	50	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 50.0	U, D	µg/l	50.0	12.4	50	"	"	"	"	"	X
75-00-3	Chloroethane	< 100	U, D	µg/l	100	29.4	50	"	"	"	"	"	X
67-66-3	Chloroform	< 50.0	U, D	µg/l	50.0	16.3	50	"	"	"	"	"	X
74-87-3	Chloromethane	< 100	U, D	µg/l	100	18.4	50	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 100	U, D	µg/l	100	43.2	50	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 25.0	U, D	µg/l	25.0	15.8	50	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 25.0	U, D	µg/l	25.0	10.1	50	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 50.0	U, D	µg/l	50.0	13.8	50	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 50.0	U, D	µg/l	50.0	15.7	50	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 50.0	U, D	µg/l	50.0	13.6	50	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 100	U, D	µg/l	100	29.2	50	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 50.0	U, D	µg/l	50.0	16.2	50	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 50.0	U, D	µg/l	50.0	13.8	50	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 50.0	U, D	µg/l	50.0	34.6	50	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 50.0	U, D	µg/l	50.0	16.4	50	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 50.0	U, D	µg/l	50.0	18.8	50	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 50.0	U, D	µg/l	50.0	14.6	50	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 25.0	U, D	µg/l	25.0	18.0	50	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 25.0	U, D	µg/l	25.0	17.4	50	"	"	"	"	"	X
100-41-4	Ethylbenzene	**154**	D	µg/l	50.0	16.4	50	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 100	U, D	µg/l	100	26.4	50	"	"	"	"	"	X
98-82-8	Isopropylbenzene	< 50.0	U, D	µg/l	50.0	18.0	50	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 50.0	U, D	µg/l	50.0	11.8	50	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 100	U, D	µg/l	100	25.8	50	"	"	"	"	"	X
75-09-2	Methylene chloride	< 100	U, D	µg/l	100	33.0	50	"	"	"	"	"	X
100-42-5	Styrene	< 50.0	U, D	µg/l	50.0	20.2	50	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 25.0	U, D	µg/l	25.0	16.5	50	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 50.0	U, D	µg/l	50.0	28.5	50	"	"	"	"	"	X
108-88-3	Toluene	**2,970**	D	µg/l	50.0	15.0	50	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 50.0	U, D	µg/l	50.0	18.9	50	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 50.0	U, D	µg/l	50.0	25.4	50	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 50.0	U, D	µg/l	50.0	16.5	50	"	"	"	"	"	X
79-01-6	Trichloroethene	< 50.0	U, D	µg/l	50.0	24.8	50	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
BCP-MW-6 SC41135-01	N46.001.001	Ground Water	02-Nov-17 10:50	04-Nov-17

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260			GS1										
75-69-4	Trichlorofluoromethane (Freon 11)	< 50.0	U, D	µg/l	50.0	24.4	50	SW846 8260C	07-Nov-17	07-Nov-17	GMA	1718835	X
75-01-4	Vinyl chloride	< 50.0	U, D	µg/l	50.0	23.6	50	"	"	"	"	"	X
1330-20-7	Total Xylenes	**1,500**	D	µg/l	150	150	50	"	"	"	"	"	X
110-82-7	Cyclohexane	**84.0**	J, D	µg/l	250	39.4	50	"	"	"	"	"	X
79-20-9	Methyl acetate	< 250	U, D	µg/l	250	32.4	50	"	"	"	"	"	X
108-87-2	Methylcyclohexane	**44.0**	J, D	µg/l	250	37.1	50	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*104*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*95*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*			*70-130 %*			"	"	"	"	"	
Tentatively Identified Compounds by GC/MS													
	Tentatively Identified Compounds	**None found**		µg/l			50	SW846 8260C TICs	"	"	GMA	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
BCP-MW-1	N46.001.001	Ground Water	02-Nov-17 11:35	04-Nov-17
SC41135-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.53	1	SW846 8260C	07-Nov-17	07-Nov-17	GMA	1718835	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	0.80	1	"	"	"	"	"	X
71-43-2	Benzene	**0.33**	J	µg/l	1.00	0.28	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50	U	µg/l	0.50	0.42	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.42	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.90	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	1.07	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.41	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.25	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.59	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.37	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.86	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.32	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.20	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00	U	µg/l	2.00	0.58	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.69	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.38	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.35	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	**0.40**	J	µg/l	1.00	0.33	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.53	1	"	"	"	"	"	X
98-82-8	Isopropylbenzene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.52	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.66	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.57	1	"	"	"	"	"	X
108-88-3	Toluene	**1.10**		µg/l	1.00	0.30	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.38	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.51	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.50	1	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
BCP-MW-1	N46.001.001	Ground Water	02-Nov-17 11:35	04-Nov-17
SC41135-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.49	1	SW846 8260C	07-Nov-17	07-Nov-17	GMA	1718835	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.47	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	**15.6**	NonTRG TIC	µg/l	10.0	5.90	1	"	"	"	"	"	X
1330-20-7	Total Xylenes	< 3.00	U	µg/l	3.00	3.00	1	"	"	"	"	"	X
110-82-7	Cyclohexane	< 5.00	U	µg/l	5.00	0.79	1	"	"	"	"	"	X
79-20-9	Methyl acetate	< 5.00	U	µg/l	5.00	0.65	1	"	"	"	"	"	X
108-87-2	Methylcyclohexane	< 5.00	U	µg/l	5.00	0.74	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*103*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*103*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*99*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*101*			*70-130 %*			"	"	"	"	"	
Tentatively Identified Compounds by GC/MS			J N										
79-29-8	Butane, 2,3-dimethyl-	**18**		µg/l			1	SW846 8260C TICs	"	"	GMA	"	
004850-28-6	Cyclopentane, 1,2,4-trimeth...	**7.5**		µg/l			1	"	"	"	"	"	
565-59-3	Pentane, 2,3-dimethyl-	**15**		µg/l			1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
BCP-MW-7	N46.001.001	Ground Water	02-Nov-17 12:25	04-Nov-17
SC41135-03				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.53	1	SW846 8260C	07-Nov-17	07-Nov-17	GMA	1718835	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	0.80	1	"	"	"	"	"	X
71-43-2	Benzene	**2.81**		µg/l	1.00	0.28	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50	U	µg/l	0.50	0.42	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.42	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.90	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	1.07	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.41	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.25	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.59	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.37	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.86	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.32	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.20	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00	U	µg/l	2.00	0.58	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.69	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.38	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.35	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	**0.45**	J	µg/l	1.00	0.33	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.53	1	"	"	"	"	"	X
98-82-8	Isopropylbenzene	**0.38**	J	µg/l	1.00	0.36	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.52	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.66	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.57	1	"	"	"	"	"	X
108-88-3	Toluene	**0.61**	J	µg/l	1.00	0.30	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.38	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.51	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.50	1	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
BCP-MW-7	N46.001.001	Ground Water	02-Nov-17 12:25	04-Nov-17
SC41135-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.49	1	SW846 8260C	07-Nov-17	07-Nov-17	GMA	1718835	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.47	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	**37.6**	NonTRG TIC	µg/l	10.0	5.90	1	"	"	"	"	"	X
1330-20-7	Total Xylenes	< 3.00	U	µg/l	3.00	3.00	1	"	"	"	"	"	X
110-82-7	Cyclohexane	**0.99**	J	µg/l	5.00	0.79	1	"	"	"	"	"	X
79-20-9	Methyl acetate	< 5.00	U	µg/l	5.00	0.65	1	"	"	"	"	"	X
108-87-2	Methylcyclohexane	< 5.00	U	µg/l	5.00	0.74	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*105*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*103*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*70-130 %*			"	"	"	"	"	
Tentatively Identified Compounds by GC/MS													
	Tentatively Identified Compounds	**None found**		µg/l			1	SW846 8260C TICs	"	"	GMA	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
BCP-MW-3	N46.001.001	Ground Water	02-Nov-17 13:50	04-Nov-17
SC41135-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS			GS1										
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 10.0	U, D	µg/l	10.0	5.32	10	SW846 8260C	08-Nov-17	08-Nov-17	GMA	1718908	X
67-64-1	Acetone	< 100	U, D	µg/l	100	8.04	10	"	"	"	"	"	X
71-43-2	Benzene	**364**	D	µg/l	10.0	2.84	10	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 5.00	U, D	µg/l	5.00	4.17	10	"	"	"	"	"	X
75-25-2	Bromoform	< 10.0	U, D	µg/l	10.0	4.25	10	"	"	"	"	"	X
74-83-9	Bromomethane	< 20.0	U, D	µg/l	20.0	8.96	10	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 20.0	U, D	µg/l	20.0	10.7	10	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 20.0	U, D	µg/l	20.0	4.12	10	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 10.0	U, D	µg/l	10.0	4.37	10	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 10.0	U, D	µg/l	10.0	2.49	10	"	"	"	"	"	X
75-00-3	Chloroethane	< 20.0	U, D	µg/l	20.0	5.88	10	"	"	"	"	"	X
67-66-3	Chloroform	< 10.0	U, D	µg/l	10.0	3.26	10	"	"	"	"	"	X
74-87-3	Chloromethane	< 20.0	U, D	µg/l	20.0	3.68	10	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 20.0	U, D	µg/l	20.0	8.63	10	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 5.00	U, D	µg/l	5.00	3.17	10	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 5.00	U, D	µg/l	5.00	2.02	10	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	2.77	10	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	3.14	10	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	2.72	10	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 20.0	U, D	µg/l	20.0	5.84	10	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 10.0	U, D	µg/l	10.0	3.23	10	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 10.0	U, D	µg/l	10.0	2.77	10	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 10.0	U, D	µg/l	10.0	6.93	10	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 10.0	U, D	µg/l	10.0	3.27	10	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 10.0	U, D	µg/l	10.0	3.77	10	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 5.00	U, D	µg/l	5.00	3.59	10	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 5.00	U, D	µg/l	5.00	3.47	10	"	"	"	"	"	X
100-41-4	Ethylbenzene	**384**	D	µg/l	10.0	3.29	10	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 20.0	U, D	µg/l	20.0	5.28	10	"	"	"	"	"	X
98-82-8	Isopropylbenzene	**8.70**	J, D	µg/l	10.0	3.60	10	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 10.0	U, D	µg/l	10.0	2.37	10	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 20.0	U, D	µg/l	20.0	5.15	10	"	"	"	"	"	X
75-09-2	Methylene chloride	< 20.0	U, D	µg/l	20.0	6.61	10	"	"	"	"	"	X
91-20-3	Naphthalene	**357**	NonTRG TIC, D	µg/l	10.0	3.51	10	"	"	"	"	"	X
100-42-5	Styrene	< 10.0	U, D	µg/l	10.0	4.05	10	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 5.00	U, D	µg/l	5.00	3.30	10	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 10.0	U, D	µg/l	10.0	5.70	10	"	"	"	"	"	X
108-88-3	Toluene	**34.8**	D	µg/l	10.0	2.99	10	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 10.0	U, D	µg/l	10.0	3.78	10	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 10.0	U, D	µg/l	10.0	5.09	10	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
BCP-MW-3	N46.001.001	Ground Water	02-Nov-17 13:50	04-Nov-17
SC41135-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260			GS1										
79-00-5	1,1,2-Trichloroethane	< 10.0	U, D	µg/l	10.0	3.30	10	SW846 8260C	08-Nov-17	08-Nov-17	GMA	1718908	X
79-01-6	Trichloroethene	< 10.0	U, D	µg/l	10.0	4.97	10	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 10.0	U, D	µg/l	10.0	4.87	10	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	**737**	NonTRG TIC, D	µg/l	10.0	3.55	10	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	**133**	NonTRG TIC, D	µg/l	10.0	4.31	10	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 10.0	U, D	µg/l	10.0	4.72	10	"	"	"	"	"	X
1330-20-7	Total Xylenes	**930**	D	µg/l	30.0	30.0	10	"	"	"	"	"	X
110-82-7	Cyclohexane	**60.5**	D	µg/l	50.0	7.87	10	"	"	"	"	"	X
79-20-9	Methyl acetate	**31.9**	J, D	µg/l	50.0	6.47	10	"	"	"	"	"	X
108-87-2	Methylcyclohexane	**33.4**	J, D	µg/l	50.0	7.42	10	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*105*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*96*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*101*			*70-130 %*			"	"	"	"	"	
Tentatively Identified Compounds by GC/MS			J N										
	3-Phenylbut-1-ene	**160**	D	µg/l			10	SW846 8260C TICs	"	"	GMA	"	
95-36-3	Benzene, 1,2,3-trimethyl-	**150**	D	µg/l			10	"	"	"	"	"	
611-14-3	Benzene, 1-ethyl-2-methyl-	**190**	D	µg/l			10	"	"	"	"	"	
622-96-8	Benzene, 1-ethyl-4-methyl-	**270**	D	µg/l			10	"	"	"	"	"	
000527-84-4	Benzene, 1-methyl-2-(1-meth...	**150**	D	µg/l			10	"	"	"	"	"	
96-37-7	Cyclopentane, methyl-	**140**	D	µg/l			10	"	"	"	"	"	
000930-18-7	Cyclopropane, 1,2-dimethyl-...	**99**	D	µg/l			10	"	"	"	"	"	
496-11-7	Indane	**200**	D	µg/l			10	"	"	"	"	"	
109-66-0	Pentane	**110**	D	µg/l			10	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
BCP-MW-5	N46.001.001	Ground Water	02-Nov-17 14:45	04-Nov-17
SC41135-05				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS			GS1										
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 100	U, D	µg/l	100	53.2	100	SW846 8260C	07-Nov-17	07-Nov-17	GMA	1718835	X
67-64-1	Acetone	< 1000	U, D	µg/l	1000	80.4	100	"	"	"	"	"	X
71-43-2	Benzene	**283**	D	µg/l	100	28.4	100	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 50.0	U, D	µg/l	50.0	41.7	100	"	"	"	"	"	X
75-25-2	Bromoform	< 100	U, D	µg/l	100	42.5	100	"	"	"	"	"	X
74-83-9	Bromomethane	< 200	U, D	µg/l	200	89.6	100	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 200	U, D	µg/l	200	107	100	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 200	U, D	µg/l	200	41.2	100	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 100	U, D	µg/l	100	43.7	100	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 100	U, D	µg/l	100	24.9	100	"	"	"	"	"	X
75-00-3	Chloroethane	< 200	U, D	µg/l	200	58.8	100	"	"	"	"	"	X
67-66-3	Chloroform	< 100	U, D	µg/l	100	32.6	100	"	"	"	"	"	X
74-87-3	Chloromethane	< 200	U, D	µg/l	200	36.8	100	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 200	U, D	µg/l	200	86.3	100	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 50.0	U, D	µg/l	50.0	31.7	100	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 50.0	U, D	µg/l	50.0	20.2	100	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 100	U, D	µg/l	100	27.7	100	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 100	U, D	µg/l	100	31.4	100	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 100	U, D	µg/l	100	27.2	100	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 200	U, D	µg/l	200	58.4	100	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 100	U, D	µg/l	100	32.3	100	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 100	U, D	µg/l	100	27.7	100	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 100	U, D	µg/l	100	69.3	100	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 100	U, D	µg/l	100	32.7	100	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 100	U, D	µg/l	100	37.7	100	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 100	U, D	µg/l	100	29.2	100	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 50.0	U, D	µg/l	50.0	35.9	100	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 50.0	U, D	µg/l	50.0	34.7	100	"	"	"	"	"	X
100-41-4	Ethylbenzene	**1,660**	D	µg/l	100	32.9	100	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 200	U, D	µg/l	200	52.8	100	"	"	"	"	"	X
98-82-8	Isopropylbenzene	< 100	U, D	µg/l	100	36.0	100	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 100	U, D	µg/l	100	23.7	100	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 200	U, D	µg/l	200	51.5	100	"	"	"	"	"	X
75-09-2	Methylene chloride	< 200	U, D	µg/l	200	66.1	100	"	"	"	"	"	X
91-20-3	Naphthalene	**1,030**	NonTRG TIC, D	µg/l	100	35.1	100	"	"	"	"	"	X
100-42-5	Styrene	< 100	U, D	µg/l	100	40.5	100	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 50.0	U, D	µg/l	50.0	33.0	100	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 100	U, D	µg/l	100	57.0	100	"	"	"	"	"	X
108-88-3	Toluene	**82.0**	J, D	µg/l	100	29.9	100	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 100	U, D	µg/l	100	37.8	100	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 100	U, D	µg/l	100	50.9	100	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
BCP-MW-5 SC41135-05	N46.001.001	Ground Water	02-Nov-17 14:45	04-Nov-17

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260			GS1										
79-00-5	1,1,2-Trichloroethane	< 100	U, D	µg/l	100	33.0	100	SW846 8260C	07-Nov-17	07-Nov-17	GMA	1718835	X
79-01-6	Trichloroethene	< 100	U, D	µg/l	100	49.7	100	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 100	U, D	µg/l	100	48.7	100	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	**2,490**	NonTRG TIC, D	µg/l	100	35.5	100	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 100	U, D	µg/l	100	47.2	100	"	"	"	"	"	X
1330-20-7	Total Xylenes	**5,610**	D	µg/l	300	300	100	"	"	"	"	"	X
110-82-7	Cyclohexane	**238**	J, D	µg/l	500	78.7	100	"	"	"	"	"	X
79-20-9	Methyl acetate	< 500	U, D	µg/l	500	64.7	100	"	"	"	"	"	X
108-87-2	Methylcyclohexane	**106**	J, D	µg/l	500	74.2	100	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*104*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*104*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*96*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*103*			*70-130 %*			"	"	"	"	"	
Tentatively Identified Compounds by GC/MS			J N										
95-36-3	Benzene, 1,2,3-trimethyl-	**630**	D	µg/l			100	SW846 8260C TICs	"	"	GMA	"	
611-14-3	Benzene, 1-ethyl-2-methyl-	**840**	D	µg/l			100	"	"	"	"	"	
96-37-7	Cyclopentane, methyl-	**550**	D	µg/l			100	"	"	"	"	"	
496-11-7	Indane	**550**	D	µg/l			100	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank	N46.001.001	Aqueous	02-Nov-17 00:00	04-Nov-17
SC41135-06				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.53	1	SW846 8260C	07-Nov-17	07-Nov-17	GMA	1718835	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	0.80	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50	U	µg/l	0.50	0.42	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.42	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.90	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	1.07	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.41	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.25	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.59	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.37	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.86	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.32	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.20	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00	U	µg/l	2.00	0.58	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.69	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.38	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.35	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.53	1	"	"	"	"	"	X
98-82-8	Isopropylbenzene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.52	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.66	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.57	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.38	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.51	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.50	1	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank SC41135-06	N46.001.001	Aqueous	02-Nov-17 00:00	04-Nov-17

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.49	1	SW846 8260C	07-Nov-17	07-Nov-17	GMA	1718835	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.47	1	"	"	"	"	"	X
1330-20-7	Total Xylenes	< 3.00	U	µg/l	3.00	3.00	1	"	"	"	"	"	X
110-82-7	Cyclohexane	< 5.00	U	µg/l	5.00	0.79	1	"	"	"	"	"	X
79-20-9	Methyl acetate	< 5.00	U	µg/l	5.00	0.65	1	"	"	"	"	"	X
108-87-2	Methylcyclohexane	< 5.00	U	µg/l	5.00	0.74	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*104*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*96*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*			*70-130 %*			"	"	"	"	"	
Tentatively Identified Compounds by GC/MS													
	Tentatively Identified Compounds	**None found**		µg/l			1	SW846 8260C TICs	"	"	GMA	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718835 - SW846 5030 Water MS										
Blank (1718835-BLK1)					Prepared & Analyzed: 07-Nov-17					
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00						
Acetone	< 10.0	U	µg/l	10.0						
Benzene	< 1.00	U	µg/l	1.00						
Bromodichloromethane	< 0.50	U	µg/l	0.50						
Bromoform	< 1.00	U	µg/l	1.00						
Bromomethane	< 2.00	U	µg/l	2.00						
2-Butanone (MEK)	< 2.00	U	µg/l	2.00						
Carbon disulfide	< 2.00	U	µg/l	2.00						
Carbon tetrachloride	< 1.00	U	µg/l	1.00						
Chlorobenzene	< 1.00	U	µg/l	1.00						
Chloroethane	< 2.00	U	µg/l	2.00						
Chloroform	< 1.00	U	µg/l	1.00						
Chloromethane	< 2.00	U	µg/l	2.00						
1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00						
Dibromochloromethane	< 0.50	U	µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50						
1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00						
1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00						
1,4-Dichlorobenzene	< 1.00	U	µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00	U	µg/l	2.00						
1,1-Dichloroethane	< 1.00	U	µg/l	1.00						
1,2-Dichloroethane	< 1.00	U	µg/l	1.00						
1,1-Dichloroethene	< 1.00	U	µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00	U	µg/l	1.00						
1,2-Dichloropropane	< 1.00	U	µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50						
Ethylbenzene	< 1.00	U	µg/l	1.00						
2-Hexanone (MBK)	< 2.00	U	µg/l	2.00						
Isopropylbenzene	< 1.00	U	µg/l	1.00						
Methyl tert-butyl ether	< 1.00	U	µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00						
Methylene chloride	< 2.00	U	µg/l	2.00						
Styrene	< 1.00	U	µg/l	1.00						
1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50						
Tetrachloroethene	< 1.00	U	µg/l	1.00						
Toluene	< 1.00	U	µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00	U	µg/l	1.00						
1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00						
1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00						
Trichloroethene	< 1.00	U	µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00						
Vinyl chloride	< 1.00	U	µg/l	1.00						
Total Xylenes	< 3.00	U	µg/l	3.00						
Cyclohexane	< 5.00	U	µg/l	5.00						
Methyl acetate	< 5.00	U	µg/l	5.00						
Methylcyclohexane	< 5.00	U	µg/l	5.00						
Surrogate: 4-Bromofluorobenzene	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*50.9*		µg/l		*50.0*		*102*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718835 - SW846 5030 Water MS										
Blank (1718835-BLK1)						Prepared & Analyzed: 07-Nov-17				
Surrogate: 1,2-Dichloroethane-d4	*48.8*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Blank (1718835-BLK2)						Prepared & Analyzed: 07-Nov-17				
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 5.00	U, D	µg/l	5.00						
Acetone	< 50.0	U, D	µg/l	50.0						
Benzene	< 5.00	U, D	µg/l	5.00						
Bromodichloromethane	< 2.50	U, D	µg/l	2.50						
Bromoform	< 5.00	U, D	µg/l	5.00						
Bromomethane	< 10.0	U, D	µg/l	10.0						
2-Butanone (MEK)	< 10.0	U, D	µg/l	10.0						
Carbon disulfide	< 10.0	U, D	µg/l	10.0						
Carbon tetrachloride	< 5.00	U, D	µg/l	5.00						
Chlorobenzene	< 5.00	U, D	µg/l	5.00						
Chloroethane	< 10.0	U, D	µg/l	10.0						
Chloroform	**2.95**	J, D	µg/l	5.00						
Chloromethane	< 10.0	U, D	µg/l	10.0						
1,2-Dibromo-3-chloropropane	< 10.0	U, D	µg/l	10.0						
Dibromochloromethane	< 2.50	U, D	µg/l	2.50						
1,2-Dibromoethane (EDB)	< 2.50	U, D	µg/l	2.50						
1,2-Dichlorobenzene	< 5.00	U, D	µg/l	5.00						
1,3-Dichlorobenzene	< 5.00	U, D	µg/l	5.00						
1,4-Dichlorobenzene	< 5.00	U, D	µg/l	5.00						
Dichlorodifluoromethane (Freon12)	< 10.0	U, D	µg/l	10.0						
1,1-Dichloroethane	< 5.00	U, D	µg/l	5.00						
1,2-Dichloroethane	< 5.00	U, D	µg/l	5.00						
1,1-Dichloroethene	< 5.00	U, D	µg/l	5.00						
cis-1,2-Dichloroethene	< 5.00	U, D	µg/l	5.00						
trans-1,2-Dichloroethene	< 5.00	U, D	µg/l	5.00						
1,2-Dichloropropane	< 5.00	U, D	µg/l	5.00						
cis-1,3-Dichloropropene	< 2.50	U, D	µg/l	2.50						
trans-1,3-Dichloropropene	< 2.50	U, D	µg/l	2.50						
Ethylbenzene	< 5.00	U, D	µg/l	5.00						
2-Hexanone (MBK)	< 10.0	U, D	µg/l	10.0						
Isopropylbenzene	< 5.00	U, D	µg/l	5.00						
Methyl tert-butyl ether	< 5.00	U, D	µg/l	5.00						
4-Methyl-2-pentanone (MIBK)	< 10.0	U, D	µg/l	10.0						
Methylene chloride	< 10.0	U, D	µg/l	10.0						
Styrene	< 5.00	U, D	µg/l	5.00						
1,1,2,2-Tetrachloroethane	< 2.50	U, D	µg/l	2.50						
Tetrachloroethene	< 5.00	U, D	µg/l	5.00						
Toluene	< 5.00	U, D	µg/l	5.00						
1,2,4-Trichlorobenzene	**5.55**	D	µg/l	5.00						
1,1,1-Trichloroethane	< 5.00	U, D	µg/l	5.00						
1,1,2-Trichloroethane	< 5.00	U, D	µg/l	5.00						
Trichloroethene	< 5.00	U, D	µg/l	5.00						
Trichlorofluoromethane (Freon 11)	< 5.00	U, D	µg/l	5.00						
Vinyl chloride	< 5.00	U, D	µg/l	5.00						
Total Xylenes	< 15.0	U, D	µg/l	15.0						
Cyclohexane	< 25.0	U, D	µg/l	25.0						
Methyl acetate	**115**	D	µg/l	25.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718835 - SW846 5030 Water MS										
Blank (1718835-BLK2)					Prepared & Analyzed: 07-Nov-17					
Methylcyclohexane	< 25.0	U, D	µg/l	25.0						
Surrogate: 4-Bromofluorobenzene	*51.3*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*51.0*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.3*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*51.2*		µg/l		*50.0*		*102*	*70-130*		
LCS (1718835-BS1)					Prepared & Analyzed: 07-Nov-17					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**20.4**		µg/l		20.0		102	70-130		
Acetone	**18.8**		µg/l		20.0		94	70-130		
Benzene	**23.8**		µg/l		20.0		119	70-130		
Bromodichloromethane	**22.8**		µg/l		20.0		114	70-130		
Bromoform	**21.4**		µg/l		20.0		107	70-130		
Bromomethane	**15.2**		µg/l		20.0		76	70-130		
2-Butanone (MEK)	**18.0**		µg/l		20.0		90	70-130		
Carbon disulfide	**17.3**		µg/l		20.0		86	70-130		
Carbon tetrachloride	**25.5**		µg/l		20.0		127	70-130		
Chlorobenzene	**22.0**		µg/l		20.0		110	70-130		
Chloroethane	**21.6**		µg/l		20.0		108	70-130		
Chloroform	**22.4**		µg/l		20.0		112	70-130		
Chloromethane	**16.9**		µg/l		20.0		85	70-130		
1,2-Dibromo-3-chloropropane	**18.9**		µg/l		20.0		95	70-130		
Dibromochloromethane	**23.5**		µg/l		20.0		118	70-130		
1,2-Dibromoethane (EDB)	**22.2**		µg/l		20.0		111	70-130		
1,2-Dichlorobenzene	**21.7**		µg/l		20.0		109	70-130		
1,3-Dichlorobenzene	**20.8**		µg/l		20.0		104	70-130		
1,4-Dichlorobenzene	**20.8**		µg/l		20.0		104	70-130		
Dichlorodifluoromethane (Freon12)	**23.1**		µg/l		20.0		116	70-130		
1,1-Dichloroethane	**23.0**		µg/l		20.0		115	70-130		
1,2-Dichloroethane	**22.5**		µg/l		20.0		112	70-130		
1,1-Dichloroethene	**23.6**		µg/l		20.0		118	70-130		
cis-1,2-Dichloroethene	**23.2**		µg/l		20.0		116	70-130		
trans-1,2-Dichloroethene	**23.6**		µg/l		20.0		118	70-130		
1,2-Dichloropropane	**21.9**		µg/l		20.0		109	70-130		
cis-1,3-Dichloropropene	**21.1**		µg/l		20.0		106	70-130		
trans-1,3-Dichloropropene	**22.8**		µg/l		20.0		114	70-130		
Ethylbenzene	**21.3**		µg/l		20.0		107	70-130		
2-Hexanone (MBK)	**19.5**		µg/l		20.0		98	70-130		
Isopropylbenzene	**22.5**		µg/l		20.0		112	70-130		
Methyl tert-butyl ether	**21.5**		µg/l		20.0		107	70-130		
4-Methyl-2-pentanone (MIBK)	**19.6**		µg/l		20.0		98	70-130		
Methylene chloride	**19.0**		µg/l		20.0		95	70-130		
Styrene	**20.4**		µg/l		20.0		102	70-130		
1,1,2,2-Tetrachloroethane	**20.3**		µg/l		20.0		101	70-130		
Tetrachloroethene	**24.7**		µg/l		20.0		123	70-130		
Toluene	**23.3**		µg/l		20.0		116	70-130		
1,2,4-Trichlorobenzene	**19.0**	B	µg/l		20.0		95	70-130		
1,1,1-Trichloroethane	**24.2**		µg/l		20.0		121	70-130		
1,1,2-Trichloroethane	**21.6**		µg/l		20.0		108	70-130		
Trichloroethene	**23.0**		µg/l		20.0		115	70-130		
Trichlorofluoromethane (Freon 11)	**25.0**		µg/l		20.0		125	70-130		
Vinyl chloride	**21.8**		µg/l		20.0		109	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718835 - SW846 5030 Water MS										
LCS (1718835-BS1)						Prepared & Analyzed: 07-Nov-17				
Cyclohexane	**23.4**		µg/l		20.0		117	70-130		
Methyl acetate	**12.7**	QM9, B	µg/l		20.0		64	70-130		
Methylcyclohexane	**24.1**		µg/l		20.0		121	70-130		
Surrogate: 4-Bromofluorobenzene	*51.2*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*52.7*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.5*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*50.2*		µg/l		*50.0*		*100*	*70-130*		
LCS (1718835-BS2)						Prepared & Analyzed: 07-Nov-17				
1,1,2-Trichlorotrifluoroethane (Freon 113)	**24.7**	D	µg/l		20.0		123	70-130		
Acetone	**20.0**	D	µg/l		20.0		100	70-130		
Benzene	**22.1**	D	µg/l		20.0		111	70-130		
Bromodichloromethane	**21.3**	D	µg/l		20.0		106	70-130		
Bromoform	**20.7**	D	µg/l		20.0		103	70-130		
Bromomethane	**13.0**	D	µg/l		20.0		65	70-130		
2-Butanone (MEK)	**19.5**	D	µg/l		20.0		98	70-130		
Carbon disulfide	**24.1**	D	µg/l		20.0		120	70-130		
Carbon tetrachloride	**23.2**	D	µg/l		20.0		116	70-130		
Chlorobenzene	**21.0**	D	µg/l		20.0		105	70-130		
Chloroethane	**19.7**	D	µg/l		20.0		98	70-130		
Chloroform	**22.3**	D	µg/l		20.0		112	70-130		
Chloromethane	**16.4**	D	µg/l		20.0		82	70-130		
1,2-Dibromo-3-chloropropane	**19.3**	D	µg/l		20.0		96	70-130		
Dibromochloromethane	**22.1**	D	µg/l		20.0		111	70-130		
1,2-Dibromoethane (EDB)	**21.0**	D	µg/l		20.0		105	70-130		
1,2-Dichlorobenzene	**20.8**	D	µg/l		20.0		104	70-130		
1,3-Dichlorobenzene	**20.4**	D	µg/l		20.0		102	70-130		
1,4-Dichlorobenzene	**20.4**	D	µg/l		20.0		102	70-130		
Dichlorodifluoromethane (Freon12)	**21.5**	D	µg/l		20.0		108	70-130		
1,1-Dichloroethane	**21.6**	D	µg/l		20.0		108	70-130		
1,2-Dichloroethane	**21.8**	D	µg/l		20.0		109	70-130		
1,1-Dichloroethene	**25.2**	D	µg/l		20.0		126	70-130		
cis-1,2-Dichloroethene	**22.2**	D	µg/l		20.0		111	70-130		
trans-1,2-Dichloroethene	**21.6**	D	µg/l		20.0		108	70-130		
1,2-Dichloropropane	**20.6**	D	µg/l		20.0		103	70-130		
cis-1,3-Dichloropropene	**21.7**	D	µg/l		20.0		108	70-130		
trans-1,3-Dichloropropene	**22.4**	D	µg/l		20.0		112	70-130		
Ethylbenzene	**20.5**	D	µg/l		20.0		102	70-130		
2-Hexanone (MBK)	**19.5**	D	µg/l		20.0		97	70-130		
Isopropylbenzene	**21.2**	D	µg/l		20.0		106	70-130		
Methyl tert-butyl ether	**20.4**	D	µg/l		20.0		102	70-130		
4-Methyl-2-pentanone (MIBK)	**19.6**	D	µg/l		20.0		98	70-130		
Methylene chloride	**25.3**	D	µg/l		20.0		126	70-130		
Styrene	**20.3**	D	µg/l		20.0		101	70-130		
1,1,2,2-Tetrachloroethane	**20.1**	D	µg/l		20.0		101	70-130		
Tetrachloroethene	**22.4**	D	µg/l		20.0		112	70-130		
Toluene	**22.0**	D	µg/l		20.0		110	70-130		
1,2,4-Trichlorobenzene	**19.9**	D, B	µg/l		20.0		99	70-130		
1,1,1-Trichloroethane	**22.5**	D	µg/l		20.0		113	70-130		
1,1,2-Trichloroethane	**21.2**	D	µg/l		20.0		106	70-130		
Trichloroethene	**21.4**	D	µg/l		20.0		107	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718835 - SW846 5030 Water MS										
LCS (1718835-BS2)					Prepared & Analyzed: 07-Nov-17					
Trichlorofluoromethane (Freon 11)	**22.8**	D	µg/l		20.0		114	70-130		
Vinyl chloride	**19.8**	D	µg/l		20.0		99	70-130		
Cyclohexane	**22.0**	D	µg/l		20.0		110	70-130		
Methyl acetate	**31.4**	D, B	µg/l		20.0		157	70-130		
Methylcyclohexane	**23.0**	D	µg/l		20.0		115	70-130		
Surrogate: 4-Bromofluorobenzene	*51.3*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*52.5*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.2*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*49.8*		µg/l		*50.0*		*100*	*70-130*		
LCS Dup (1718835-BSD1)					Prepared & Analyzed: 07-Nov-17					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**23.1**		µg/l		20.0		116	70-130	13	20
Acetone	**19.9**		µg/l		20.0		100	70-130	6	20
Benzene	**22.1**		µg/l		20.0		110	70-130	8	20
Bromodichloromethane	**21.4**		µg/l		20.0		107	70-130	7	20
Bromoform	**21.9**		µg/l		20.0		109	70-130	2	20
Bromomethane	**14.9**		µg/l		20.0		75	70-130	2	20
2-Butanone (MEK)	**20.1**		µg/l		20.0		101	70-130	11	20
Carbon disulfide	**23.0**	QR2	µg/l		20.0		115	70-130	28	20
Carbon tetrachloride	**22.7**		µg/l		20.0		113	70-130	12	20
Chlorobenzene	**21.4**		µg/l		20.0		107	70-130	3	20
Chloroethane	**18.9**		µg/l		20.0		95	70-130	13	20
Chloroform	**21.8**		µg/l		20.0		109	70-130	3	20
Chloromethane	**16.4**		µg/l		20.0		82	70-130	3	20
1,2-Dibromo-3-chloropropane	**19.9**		µg/l		20.0		100	70-130	5	20
Dibromochloromethane	**22.2**		µg/l		20.0		111	70-130	6	20
1,2-Dibromoethane (EDB)	**21.9**		µg/l		20.0		110	70-130	1	20
1,2-Dichlorobenzene	**21.1**		µg/l		20.0		106	70-130	3	20
1,3-Dichlorobenzene	**20.4**		µg/l		20.0		102	70-130	2	20
1,4-Dichlorobenzene	**20.8**		µg/l		20.0		104	70-130	0.3	20
Dichlorodifluoromethane (Freon12)	**20.4**		µg/l		20.0		102	70-130	13	20
1,1-Dichloroethane	**21.3**		µg/l		20.0		106	70-130	8	20
1,2-Dichloroethane	**21.6**		µg/l		20.0		108	70-130	4	20
1,1-Dichloroethene	**20.9**		µg/l		20.0		104	70-130	12	20
cis-1,2-Dichloroethene	**22.3**		µg/l		20.0		112	70-130	4	20
trans-1,2-Dichloroethene	**22.2**		µg/l		20.0		111	70-130	6	20
1,2-Dichloropropane	**19.9**		µg/l		20.0		100	70-130	9	20
cis-1,3-Dichloropropene	**20.6**		µg/l		20.0		103	70-130	3	20
trans-1,3-Dichloropropene	**21.6**		µg/l		20.0		108	70-130	6	20
Ethylbenzene	**20.4**		µg/l		20.0		102	70-130	4	20
2-Hexanone (MBK)	**22.0**		µg/l		20.0		110	70-130	12	20
Isopropylbenzene	**21.0**		µg/l		20.0		105	70-130	7	20
Methyl tert-butyl ether	**20.9**		µg/l		20.0		105	70-130	3	20
4-Methyl-2-pentanone (MIBK)	**20.4**		µg/l		20.0		102	70-130	4	20
Methylene chloride	**24.8**	QR2	µg/l		20.0		124	70-130	27	20
Styrene	**20.1**		µg/l		20.0		101	70-130	1	20
1,1,2,2-Tetrachloroethane	**20.3**		µg/l		20.0		101	70-130	0.1	20
Tetrachloroethene	**22.6**		µg/l		20.0		113	70-130	9	20
Toluene	**22.0**		µg/l		20.0		110	70-130	6	20
1,2,4-Trichlorobenzene	**19.0**	B	µg/l		20.0		95	70-130	0.1	20
1,1,1-Trichloroethane	**22.2**		µg/l		20.0		111	70-130	9	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718835 - SW846 5030 Water MS										
LCS Dup (1718835-BSD1)					Prepared & Analyzed: 07-Nov-17					
1,1,2-Trichloroethane	**22.4**		µg/l		20.0		112	70-130	4	20
Trichloroethene	**21.6**		µg/l		20.0		108	70-130	6	20
Trichlorofluoromethane (Freon 11)	**21.8**		µg/l		20.0		109	70-130	13	20
Vinyl chloride	**19.8**		µg/l		20.0		99	70-130	9	20
Cyclohexane	**21.4**		µg/l		20.0		107	70-130	9	30
Methyl acetate	**18.6**	QR5, B	µg/l		20.0		93	70-130	38	30
Methylcyclohexane	**21.2**		µg/l		20.0		106	70-130	13	30
Surrogate: 4-Bromofluorobenzene	*52.2*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*52.0*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.8*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*50.6*		µg/l		*50.0*		*101*	*70-130*		
LCS Dup (1718835-BSD2)					Prepared & Analyzed: 07-Nov-17					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**27.0**	D	µg/l		20.0		135	70-130	9	20
Acetone	**21.4**	D	µg/l		20.0		107	70-130	7	20
Benzene	**23.4**	D	µg/l		20.0		117	70-130	6	20
Bromodichloromethane	**22.6**	D	µg/l		20.0		113	70-130	6	20
Bromoform	**22.2**	D	µg/l		20.0		111	70-130	7	20
Bromomethane	**16.4**	D	µg/l		20.0		82	70-130	23	20
2-Butanone (MEK)	**20.3**	D	µg/l		20.0		101	70-130	4	20
Carbon disulfide	**25.7**	D	µg/l		20.0		128	70-130	7	20
Carbon tetrachloride	**25.0**	D	µg/l		20.0		125	70-130	7	20
Chlorobenzene	**21.8**	D	µg/l		20.0		109	70-130	3	20
Chloroethane	**20.7**	D	µg/l		20.0		104	70-130	5	20
Chloroform	**23.2**	D	µg/l		20.0		116	70-130	4	20
Chloromethane	**17.4**	D	µg/l		20.0		87	70-130	6	20
1,2-Dibromo-3-chloropropane	**19.3**	D	µg/l		20.0		96	70-130	0.1	20
Dibromochloromethane	**23.4**	D	µg/l		20.0		117	70-130	5	20
1,2-Dibromoethane (EDB)	**22.2**	D	µg/l		20.0		111	70-130	6	20
1,2-Dichlorobenzene	**21.7**	D	µg/l		20.0		108	70-130	4	20
1,3-Dichlorobenzene	**21.7**	D	µg/l		20.0		108	70-130	6	20
1,4-Dichlorobenzene	**21.2**	D	µg/l		20.0		106	70-130	4	20
Dichlorodifluoromethane (Freon12)	**23.1**	D	µg/l		20.0		116	70-130	7	20
1,1-Dichloroethane	**23.0**	D	µg/l		20.0		115	70-130	6	20
1,2-Dichloroethane	**22.2**	D	µg/l		20.0		111	70-130	2	20
1,1-Dichloroethene	**23.6**	D	µg/l		20.0		118	70-130	7	20
cis-1,2-Dichloroethene	**23.3**	D	µg/l		20.0		116	70-130	5	20
trans-1,2-Dichloroethene	**23.2**	D	µg/l		20.0		116	70-130	7	20
1,2-Dichloropropane	**21.6**	D	µg/l		20.0		108	70-130	5	20
cis-1,3-Dichloropropene	**22.7**	D	µg/l		20.0		113	70-130	5	20
trans-1,3-Dichloropropene	**22.6**	D	µg/l		20.0		113	70-130	1	20
Ethylbenzene	**21.4**	D	µg/l		20.0		107	70-130	4	20
2-Hexanone (MBK)	**20.1**	D	µg/l		20.0		101	70-130	3	20
Isopropylbenzene	**22.4**	D	µg/l		20.0		112	70-130	5	20
Methyl tert-butyl ether	**21.3**	D	µg/l		20.0		106	70-130	4	20
4-Methyl-2-pentanone (MIBK)	**20.7**	D	µg/l		20.0		104	70-130	6	20
Methylene chloride	**26.7**	D	µg/l		20.0		133	70-130	5	20
Styrene	**21.8**	D	µg/l		20.0		109	70-130	7	20
1,1,2,2-Tetrachloroethane	**20.9**	D	µg/l		20.0		104	70-130	4	20
Tetrachloroethene	**24.3**	D	µg/l		20.0		122	70-130	8	20
Toluene	**23.4**	D	µg/l		20.0		117	70-130	6	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718835 - SW846 5030 Water MS										
LCS Dup (1718835-BSD2)					Prepared & Analyzed: 07-Nov-17					
1,2,4-Trichlorobenzene	**20.7**	D, B	µg/l		20.0		103	70-130	4	20
1,1,1-Trichloroethane	**24.2**	D	µg/l		20.0		121	70-130	7	20
1,1,2-Trichloroethane	**22.0**	D	µg/l		20.0		110	70-130	3	20
Trichloroethene	**23.3**	D	µg/l		20.0		116	70-130	9	20
Trichlorofluoromethane (Freon 11)	**24.7**	D	µg/l		20.0		123	70-130	8	20
Vinyl chloride	**21.0**	D	µg/l		20.0		105	70-130	6	20
Cyclohexane	**23.9**	D	µg/l		20.0		120	70-130	8	30
Methyl acetate	**32.6**	D, B	µg/l		20.0		163	70-130	4	30
Methylcyclohexane	**24.8**	D	µg/l		20.0		124	70-130	8	30
Surrogate: 4-Bromofluorobenzene	*52.4*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*52.6*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.5*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*49.7*		µg/l		*50.0*		*99*	*70-130*		
Batch 1718908 - SW846 5030 Water MS										
Blank (1718908-BLK1)					Prepared & Analyzed: 08-Nov-17					
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00						
Acetone	< 10.0	U	µg/l	10.0						
Benzene	< 1.00	U	µg/l	1.00						
Bromodichloromethane	< 0.50	U	µg/l	0.50						
Bromoform	< 1.00	U	µg/l	1.00						
Bromomethane	< 2.00	U	µg/l	2.00						
2-Butanone (MEK)	< 2.00	U	µg/l	2.00						
Carbon disulfide	< 2.00	U	µg/l	2.00						
Carbon tetrachloride	< 1.00	U	µg/l	1.00						
Chlorobenzene	< 1.00	U	µg/l	1.00						
Chloroethane	< 2.00	U	µg/l	2.00						
Chloroform	< 1.00	U	µg/l	1.00						
Chloromethane	< 2.00	U	µg/l	2.00						
1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00						
Dibromochloromethane	< 0.50	U	µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50						
1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00						
1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00						
1,4-Dichlorobenzene	< 1.00	U	µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00	U	µg/l	2.00						
1,1-Dichloroethane	< 1.00	U	µg/l	1.00						
1,2-Dichloroethane	< 1.00	U	µg/l	1.00						
1,1-Dichloroethene	< 1.00	U	µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00	U	µg/l	1.00						
1,2-Dichloropropane	< 1.00	U	µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50						
Ethylbenzene	< 1.00	U	µg/l	1.00						
2-Hexanone (MBK)	< 2.00	U	µg/l	2.00						
Isopropylbenzene	< 1.00	U	µg/l	1.00						
Methyl tert-butyl ether	**0.37**	J	µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00						
Methylene chloride	< 2.00	U	µg/l	2.00						
Styrene	< 1.00	U	µg/l	1.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718908 - SW846 5030 Water MS										
Blank (1718908-BLK1)					Prepared & Analyzed: 08-Nov-17					
1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50						
Tetrachloroethene	< 1.00	U	µg/l	1.00						
Toluene	< 1.00	U	µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00	U	µg/l	1.00						
1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00						
1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00						
Trichloroethene	< 1.00	U	µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00						
Vinyl chloride	< 1.00	U	µg/l	1.00						
Total Xylenes	< 3.00	U	µg/l	3.00						
Cyclohexane	< 5.00	U	µg/l	5.00						
Methyl acetate	< 5.00	U	µg/l	5.00						
Methylcyclohexane	< 5.00	U	µg/l	5.00						
Surrogate: 4-Bromofluorobenzene	*51.9*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*51.6*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*51.0*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*51.3*		µg/l		*50.0*		*103*	*70-130*		
LCS (1718908-BS1)					Prepared & Analyzed: 08-Nov-17					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**25.0**		µg/l		20.0		125	70-130		
Acetone	**19.7**		µg/l		20.0		98	70-130		
Benzene	**21.9**		µg/l		20.0		109	70-130		
Bromodichloromethane	**21.6**		µg/l		20.0		108	70-130		
Bromoform	**21.5**		µg/l		20.0		107	70-130		
Bromomethane	**14.2**		µg/l		20.0		71	70-130		
2-Butanone (MEK)	**19.7**		µg/l		20.0		99	70-130		
Carbon disulfide	**24.2**		µg/l		20.0		121	70-130		
Carbon tetrachloride	**23.6**		µg/l		20.0		118	70-130		
Chlorobenzene	**21.0**		µg/l		20.0		105	70-130		
Chloroethane	**18.7**		µg/l		20.0		93	70-130		
Chloroform	**21.4**		µg/l		20.0		107	70-130		
Chloromethane	**16.8**		µg/l		20.0		84	70-130		
1,2-Dibromo-3-chloropropane	**18.1**		µg/l		20.0		90	70-130		
Dibromochloromethane	**22.9**		µg/l		20.0		115	70-130		
1,2-Dibromoethane (EDB)	**20.6**		µg/l		20.0		103	70-130		
1,2-Dichlorobenzene	**20.4**		µg/l		20.0		102	70-130		
1,3-Dichlorobenzene	**20.7**		µg/l		20.0		104	70-130		
1,4-Dichlorobenzene	**19.4**		µg/l		20.0		97	70-130		
Dichlorodifluoromethane (Freon12)	**20.6**		µg/l		20.0		103	70-130		
1,1-Dichloroethane	**21.2**		µg/l		20.0		106	70-130		
1,2-Dichloroethane	**22.0**		µg/l		20.0		110	70-130		
1,1-Dichloroethene	**26.1**		µg/l		20.0		130	70-130		
cis-1,2-Dichloroethene	**22.2**		µg/l		20.0		111	70-130		
trans-1,2-Dichloroethene	**22.0**		µg/l		20.0		110	70-130		
1,2-Dichloropropane	**20.1**		µg/l		20.0		100	70-130		
cis-1,3-Dichloropropene	**20.2**		µg/l		20.0		101	70-130		
trans-1,3-Dichloropropene	**21.5**		µg/l		20.0		108	70-130		
Ethylbenzene	**20.5**		µg/l		20.0		103	70-130		
2-Hexanone (MBK)	**18.9**		µg/l		20.0		95	70-130		
Isopropylbenzene	**21.5**		µg/l		20.0		107	70-130		
Methyl tert-butyl ether	**20.2**		µg/l		20.0		101	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718908 - SW846 5030 Water MS										
LCS (1718908-BS1)						Prepared & Analyzed: 08-Nov-17				
4-Methyl-2-pentanone (MIBK)	**18.1**		µg/l		20.0		91	70-130		
Methylene chloride	**24.8**		µg/l		20.0		124	70-130		
Styrene	**19.7**		µg/l		20.0		98	70-130		
1,1,2,2-Tetrachloroethane	**19.4**		µg/l		20.0		97	70-130		
Tetrachloroethene	**23.1**		µg/l		20.0		116	70-130		
Toluene	**22.4**		µg/l		20.0		112	70-130		
1,2,4-Trichlorobenzene	**18.2**		µg/l		20.0		91	70-130		
1,1,1-Trichloroethane	**23.0**		µg/l		20.0		115	70-130		
1,1,2-Trichloroethane	**22.1**		µg/l		20.0		111	70-130		
Trichloroethene	**22.2**		µg/l		20.0		111	70-130		
Trichlorofluoromethane (Freon 11)	**22.9**		µg/l		20.0		115	70-130		
Vinyl chloride	**20.0**		µg/l		20.0		100	70-130		
Cyclohexane	**21.7**		µg/l		20.0		109	70-130		
Methyl acetate	**22.0**		µg/l		20.0		110	70-130		
Methylcyclohexane	**23.2**		µg/l		20.0		116	70-130		
Surrogate: 4-Bromofluorobenzene	*52.5*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*51.8*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.6*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*49.5*		µg/l		*50.0*		*99*	*70-130*		
LCS (1718908-BS2)						Prepared & Analyzed: 08-Nov-17				
1,1,2-Trichlorotrifluoroethane (Freon 113)	**24.0**	D	µg/l		20.0		120	70-130		
Acetone	**21.1**	D	µg/l		20.0		105	70-130		
Benzene	**21.8**	D	µg/l		20.0		109	70-130		
Bromodichloromethane	**21.3**	D	µg/l		20.0		106	70-130		
Bromoform	**21.2**	D	µg/l		20.0		106	70-130		
Bromomethane	**14.3**	D	µg/l		20.0		71	70-130		
2-Butanone (MEK)	**19.6**	D	µg/l		20.0		98	70-130		
Carbon disulfide	**21.8**	D	µg/l		20.0		109	70-130		
Carbon tetrachloride	**23.0**	D	µg/l		20.0		115	70-130		
Chlorobenzene	**20.7**	D	µg/l		20.0		104	70-130		
Chloroethane	**17.4**	D	µg/l		20.0		87	70-130		
Chloroform	**22.0**	D	µg/l		20.0		110	70-130		
Chloromethane	**15.2**	D	µg/l		20.0		76	70-130		
1,2-Dibromo-3-chloropropane	**20.0**	D	µg/l		20.0		100	70-130		
Dibromochloromethane	**22.5**	D	µg/l		20.0		112	70-130		
1,2-Dibromoethane (EDB)	**22.6**	D	µg/l		20.0		113	70-130		
1,2-Dichlorobenzene	**20.8**	D	µg/l		20.0		104	70-130		
1,3-Dichlorobenzene	**20.2**	D	µg/l		20.0		101	70-130		
1,4-Dichlorobenzene	**20.3**	D	µg/l		20.0		101	70-130		
Dichlorodifluoromethane (Freon12)	**18.0**	D	µg/l		20.0		90	70-130		
1,1-Dichloroethane	**21.2**	D	µg/l		20.0		106	70-130		
1,2-Dichloroethane	**22.0**	D	µg/l		20.0		110	70-130		
1,1-Dichloroethene	**23.3**	D	µg/l		20.0		116	70-130		
cis-1,2-Dichloroethene	**21.9**	D	µg/l		20.0		110	70-130		
trans-1,2-Dichloroethene	**21.1**	D	µg/l		20.0		106	70-130		
1,2-Dichloropropane	**20.7**	D	µg/l		20.0		104	70-130		
cis-1,3-Dichloropropene	**21.7**	D	µg/l		20.0		108	70-130		
trans-1,3-Dichloropropene	**22.9**	D	µg/l		20.0		115	70-130		
Ethylbenzene	**19.9**	D	µg/l		20.0		99	70-130		
2-Hexanone (MBK)	**20.6**	D	µg/l		20.0		103	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718908 - SW846 5030 Water MS										
LCS (1718908-BS2)					Prepared & Analyzed: 08-Nov-17					
Isopropylbenzene	**21.3**	D	µg/l		20.0		106	70-130		
Methyl tert-butyl ether	**21.0**	D	µg/l		20.0		105	70-130		
4-Methyl-2-pentanone (MIBK)	**21.0**	D	µg/l		20.0		105	70-130		
Methylene chloride	**23.7**	D	µg/l		20.0		118	70-130		
Styrene	**20.2**	D	µg/l		20.0		101	70-130		
1,1,2,2-Tetrachloroethane	**20.3**	D	µg/l		20.0		101	70-130		
Tetrachloroethene	**23.4**	D	µg/l		20.0		117	70-130		
Toluene	**22.3**	D	µg/l		20.0		112	70-130		
1,2,4-Trichlorobenzene	**19.8**	D	µg/l		20.0		99	70-130		
1,1,1-Trichloroethane	**22.5**	D	µg/l		20.0		113	70-130		
1,1,2-Trichloroethane	**21.8**	D	µg/l		20.0		109	70-130		
Trichloroethene	**21.6**	D	µg/l		20.0		108	70-130		
Trichlorofluoromethane (Freon 11)	**21.6**	D	µg/l		20.0		108	70-130		
Vinyl chloride	**17.4**	D	µg/l		20.0		87	70-130		
Cyclohexane	**21.3**	D	µg/l		20.0		107	70-130		
Methyl acetate	**52.5**	D	µg/l		20.0		263	70-130		
Methylcyclohexane	**22.2**	D	µg/l		20.0		111	70-130		
Surrogate: 4-Bromofluorobenzene	*51.8*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*51.8*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.0*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*50.2*		µg/l		*50.0*		*100*	*70-130*		
LCS Dup (1718908-BSD1)					Prepared & Analyzed: 08-Nov-17					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**23.9**		µg/l		20.0		119	70-130	5	20
Acetone	**20.2**		µg/l		20.0		101	70-130	2	20
Benzene	**21.8**		µg/l		20.0		109	70-130	0.4	20
Bromodichloromethane	**21.7**		µg/l		20.0		109	70-130	0.6	20
Bromoform	**20.5**		µg/l		20.0		102	70-130	5	20
Bromomethane	**14.4**		µg/l		20.0		72	70-130	2	20
2-Butanone (MEK)	**18.9**		µg/l		20.0		95	70-130	4	20
Carbon disulfide	**23.5**		µg/l		20.0		117	70-130	3	20
Carbon tetrachloride	**23.7**		µg/l		20.0		119	70-130	0.5	20
Chlorobenzene	**20.6**		µg/l		20.0		103	70-130	2	20
Chloroethane	**19.6**		µg/l		20.0		98	70-130	5	20
Chloroform	**21.4**		µg/l		20.0		107	70-130	0.2	20
Chloromethane	**16.3**		µg/l		20.0		82	70-130	3	20
1,2-Dibromo-3-chloropropane	**17.8**		µg/l		20.0		89	70-130	2	20
Dibromochloromethane	**22.9**		µg/l		20.0		115	70-130	0	20
1,2-Dibromoethane (EDB)	**20.9**		µg/l		20.0		104	70-130	2	20
1,2-Dichlorobenzene	**20.2**		µg/l		20.0		101	70-130	1	20
1,3-Dichlorobenzene	**19.7**		µg/l		20.0		98	70-130	5	20
1,4-Dichlorobenzene	**20.0**		µg/l		20.0		100	70-130	3	20
Dichlorodifluoromethane (Freon12)	**20.8**		µg/l		20.0		104	70-130	1	20
1,1-Dichloroethane	**20.9**		µg/l		20.0		104	70-130	1	20
1,2-Dichloroethane	**21.8**		µg/l		20.0		109	70-130	0.9	20
1,1-Dichloroethene	**27.1**	QM9	µg/l		20.0		135	70-130	4	20
cis-1,2-Dichloroethene	**21.6**		µg/l		20.0		108	70-130	3	20
trans-1,2-Dichloroethene	**22.2**		µg/l		20.0		111	70-130	1	20
1,2-Dichloropropane	**20.0**		µg/l		20.0		100	70-130	0.4	20
cis-1,3-Dichloropropene	**20.1**		µg/l		20.0		100	70-130	0.4	20
trans-1,3-Dichloropropene	**21.1**		µg/l		20.0		106	70-130	2	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718908 - SW846 5030 Water MS										
LCS Dup (1718908-BSD1)						Prepared & Analyzed: 08-Nov-17				
Ethylbenzene	**19.8**		µg/l		20.0		99	70-130	3	20
2-Hexanone (MBK)	**18.8**		µg/l		20.0		94	70-130	0.7	20
Isopropylbenzene	**20.6**		µg/l		20.0		103	70-130	4	20
Methyl tert-butyl ether	**20.1**		µg/l		20.0		100	70-130	0.5	20
4-Methyl-2-pentanone (MIBK)	**18.2**		µg/l		20.0		91	70-130	0.3	20
Methylene chloride	**25.4**		µg/l		20.0		127	70-130	2	20
Styrene	**19.8**		µg/l		20.0		99	70-130	0.5	20
1,1,2,2-Tetrachloroethane	**18.6**		µg/l		20.0		93	70-130	5	20
Tetrachloroethene	**22.8**		µg/l		20.0		114	70-130	1	20
Toluene	**21.6**		µg/l		20.0		108	70-130	3	20
1,2,4-Trichlorobenzene	**18.5**		µg/l		20.0		92	70-130	2	20
1,1,1-Trichloroethane	**23.0**		µg/l		20.0		115	70-130	0.2	20
1,1,2-Trichloroethane	**21.4**		µg/l		20.0		107	70-130	3	20
Trichloroethene	**22.0**		µg/l		20.0		110	70-130	1	20
Trichlorofluoromethane (Freon 11)	**21.8**		µg/l		20.0		109	70-130	5	20
Vinyl chloride	**19.2**		µg/l		20.0		96	70-130	4	20
Cyclohexane	**21.9**		µg/l		20.0		109	70-130	0.6	30
Methyl acetate	**20.1**		µg/l		20.0		101	70-130	9	30
Methylcyclohexane	**22.1**		µg/l		20.0		110	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*51.5*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*51.7*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.6*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*50.0*		µg/l		*50.0*		*100*	*70-130*		
LCS Dup (1718908-BSD2)						Prepared & Analyzed: 08-Nov-17				
1,1,2-Trichlorotrifluoroethane (Freon 113)	**25.8**	D	µg/l		20.0		129	70-130	7	20
Acetone	**21.5**	D	µg/l		20.0		108	70-130	2	20
Benzene	**22.4**	D	µg/l		20.0		112	70-130	3	20
Bromodichloromethane	**22.7**	D	µg/l		20.0		114	70-130	7	20
Bromoform	**22.1**	D	µg/l		20.0		110	70-130	4	20
Bromomethane	**15.3**	D	µg/l		20.0		76	70-130	7	20
2-Butanone (MEK)	**21.9**	D	µg/l		20.0		109	70-130	11	20
Carbon disulfide	**23.0**	D	µg/l		20.0		115	70-130	6	20
Carbon tetrachloride	**24.2**	D	µg/l		20.0		121	70-130	5	20
Chlorobenzene	**21.3**	D	µg/l		20.0		107	70-130	3	20
Chloroethane	**18.8**	D	µg/l		20.0		94	70-130	8	20
Chloroform	**22.3**	D	µg/l		20.0		112	70-130	1	20
Chloromethane	**16.2**	D	µg/l		20.0		81	70-130	6	20
1,2-Dibromo-3-chloropropane	**19.1**	D	µg/l		20.0		95	70-130	5	20
Dibromochloromethane	**23.9**	D	µg/l		20.0		119	70-130	6	20
1,2-Dibromoethane (EDB)	**22.4**	D	µg/l		20.0		112	70-130	0.7	20
1,2-Dichlorobenzene	**21.4**	D	µg/l		20.0		107	70-130	3	20
1,3-Dichlorobenzene	**20.8**	D	µg/l		20.0		104	70-130	3	20
1,4-Dichlorobenzene	**20.8**	D	µg/l		20.0		104	70-130	3	20
Dichlorodifluoromethane (Freon12)	**19.1**	D	µg/l		20.0		95	70-130	6	20
1,1-Dichloroethane	**21.6**	D	µg/l		20.0		108	70-130	2	20
1,2-Dichloroethane	**22.9**	D	µg/l		20.0		115	70-130	4	20
1,1-Dichloroethene	**21.2**	D	µg/l		20.0		106	70-130	9	20
cis-1,2-Dichloroethene	**22.9**	D	µg/l		20.0		115	70-130	4	20
trans-1,2-Dichloroethene	**21.2**	D	µg/l		20.0		106	70-130	0.6	20
1,2-Dichloropropane	**21.2**	D	µg/l		20.0		106	70-130	3	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1718908 - SW846 5030 Water MS										
LCS Dup (1718908-BSD2)					Prepared & Analyzed: 08-Nov-17					
cis-1,3-Dichloropropene	**22.9**	D	µg/l		20.0		114	70-130	5	20
trans-1,3-Dichloropropene	**23.9**	D	µg/l		20.0		120	70-130	4	20
Ethylbenzene	**20.8**	D	µg/l		20.0		104	70-130	4	20
2-Hexanone (MBK)	**22.2**	D	µg/l		20.0		111	70-130	7	20
Isopropylbenzene	**21.5**	D	µg/l		20.0		108	70-130	1	20
Methyl tert-butyl ether	**21.2**	D	µg/l		20.0		106	70-130	1	20
4-Methyl-2-pentanone (MIBK)	**22.4**	D	µg/l		20.0		112	70-130	6	20
Methylene chloride	**26.0**	D	µg/l		20.0		130	70-130	9	20
Styrene	**21.0**	D	µg/l		20.0		105	70-130	4	20
1,1,2,2-Tetrachloroethane	**20.6**	D	µg/l		20.0		103	70-130	2	20
Tetrachloroethene	**23.6**	D	µg/l		20.0		118	70-130	0.8	20
Toluene	**22.6**	D	µg/l		20.0		113	70-130	1	20
1,2,4-Trichlorobenzene	**21.1**	D	µg/l		20.0		106	70-130	7	20
1,1,1-Trichloroethane	**23.0**	D	µg/l		20.0		115	70-130	2	20
1,1,2-Trichloroethane	**22.2**	D	µg/l		20.0		111	70-130	2	20
Trichloroethene	**23.0**	D	µg/l		20.0		115	70-130	6	20
Trichlorofluoromethane (Freon 11)	**22.4**	D	µg/l		20.0		112	70-130	3	20
Vinyl chloride	**18.1**	D	µg/l		20.0		90	70-130	4	20
Cyclohexane	**22.6**	D	µg/l		20.0		113	70-130	6	30
Methyl acetate	**55.6**	D	µg/l		20.0		278	70-130	6	30
Methylcyclohexane	**23.7**	D	µg/l		20.0		119	70-130	7	30
Surrogate: 4-Bromofluorobenzene	*51.0*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*52.0*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.7*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*49.5*		µg/l		*50.0*		*99*	*70-130*		
SW846 8260C TICs										
Batch 1718835 - SW846 5030 Water MS										
Blank (1718835-BLK1)					Prepared & Analyzed: 07-Nov-17					
Tentatively Identified Compounds	**None found**		µg/l							
Batch 1718908 - SW846 5030 Water MS										
Blank (1718908-BLK1)					Prepared & Analyzed: 08-Nov-17					
Tentatively Identified Compounds	**None found**		µg/l							

Notes and Definitions

B	Analyte is found in the associated blank as well as in the sample (CLP B-flag).
D	Data reported from a dilution
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
J	Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
J N	(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.
NonTRG TIC	Non-target concentration sufficient to be reported as one of the highest TICs.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR5	RPD out of acceptance range.
U	Analyte included in the analysis, but not detected at or above the MDL.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

SC41135 · 8

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CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, NY 14203

Invoice To: C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, NY 14203

Project No: N46.001.001
Site Name: Conventus
Location: 1001 Main Street State: NY
Sampler(s): A.S.

Telephone #: (716) 847-1630
Project Mgr: Cody Martin cmartin@cscos.com P.O No.: _____ Quote #: _____

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: TCL VOCs (8260) attached list	Check if chlorinated
SC41135-01	BCP-MW-6	11/2/17	10:50 am		GW	3				X	☐
02	BCP-MW-1	11/2/17	11:35 am		GW	3				X	☐
03	BCP-MW-7	11/2/17	12:25pm		GW	3				X	☐
04	BCP-MW-3	11/2/17	1:50 pm		GW	3				X	☐
05	BCP-MW-5	11/2/17	2:45pm		GW	3				X	☐
											☐
											☐
											☐
											☐
											☐

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
Anna Sipp Fedex	Carolyn Rice Fedex	11/3/2017	10:20
		11/4/17	10:20.

Temp °C: Observed 2.6 | Correction Factor 0 | Corrected 2.6 | IR ID # 2

☐ EDD format: _____
☐ E-mail to: _____

Condition upon receipt: Custody Seals: ☑ Present ☑ Intact ☐ Broken
☐ Ambient ☑ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

(TCL VOCs)

VOC LIST

1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloro-1,2,2-trifluoroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2,4-Trichlorobenzene
1,2-Dibromo-3-Chloropropane
1,2-Dibromoethane
1,2-Dichlorobenzene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2-Butanone (MEK)
2-Hexanone
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Cyclohexane
Dibromochloromethane
Dichlorodifluoromethane
Ethylbenzene
Isopropylbenzene
Methyl acetate
Methyl tert-butyl ether
Methylcyclohexane
Methylene Chloride
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Trichlorofluoromethane
Vinyl chloride
1,2-Dichloroethane-d4 (Surr)
4-Bromofluorobenzene (Surr)
Dibromofluoromethane (Surr)
Toluene-d8 (Surr)
Xylenes, Total

FedEx Express **Package US Airbill**

FedEx Tracking Number **8106 0271 8210**

Form ID No. 0200

Recipient's Copy

1 From

Date 11/3/17

Sender's Name A SINGH Phone 716 545-6796

Company [redacted] C&S Company

Address 141 Elm Street, Suite 100

Dept./Floor/Suite/Room

City Buffalo State NY ZIP 14203

2 Your Internal Billing Reference

3 To

Recipient's Name Sample Receiving Phone

Company Eurofins Spectrum Analytical, Inc.

Address 4 Almgren Drive

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Agawam State MA ZIP 01001

Hold Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8106 0271 8210

4 Express Package Service * To most locations.

Packages up to 150 lbs. *For packages over 150 lbs., use the FedEx Express Freight US Airbill.*

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- ☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

☒ Saturday Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.
☐ Direct Signature — Someone at recipient's address may sign for delivery.
☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?

One box must be checked.

☐ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Restrictions apply for dangerous goods — see the current FedEx Service Guide. ☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

[redacted]

Total Packages ____ Total Weight ____ lbs. Credit Card Auth. ____

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

644

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3 12:00 B 8210 11.04

SC41135 · Bm

eurofins | Spectrum Analytical

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

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Project No: N46.001.001
Site Name: Conventus
Location: 1001 Main Street State: NY
Sampler(s): A.S.

Telephone #: (716) 847-1630
Project Mgr: Cody Martin cmartin@cscos.com P.O No.: _____ Quote #: _____

F=Field Filtered **1**=$Na_2S_2O_3$ **2**=HCl **3**=H_2SO_4 **4**=HNO_3 **5**=NaOH **6**=Ascorbic Acid
7=CH3OH **8**=$NaHSO_4$ **9**=Deionized Water **10**=H_3PO_4 **11**=_____ **12**=_____

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may appply

DW=Drinking Water **GW**=Groundwater **SW**=Surface Water **WW**=Waste Water
O=Oil **SO**=Soil **SL**=Sludge **A**=Indoor/Ambient Air **SG**=Soil Gas
X1=_____ X2=_____ X3=_____

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Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: TCL VOCs (8260) + attached list	Check if chlorinated
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03	BCP-MW-7	11/2/17	12:25pm		GW	3				X	☐
04	BCP-MW-3	11/2/17	1:50 pm		GW	3				X	☐
05	BCP-MW-5	11/2/17	2:45pm		GW	3				X	☐
06	Trip Blank	11/2/17								✓	☐
											☐
											☐
											☐
											☐

Trip Blank added. client notified Bm 11/8

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp °C
Amanda Sipp Fedex	Carolyn Rice Fedex	11/3/2017	10:00	Observed 2.6
		11/4/17	10:20	Correction Factor 0
				Corrected 2.6
				IR ID # 2

☐ EDD format: _____
☐ E-mail to: _____

Condition upon receipt: Custody Seals: ☑ Present ☑ Intact ☐ Broken
☐ Ambient ☑ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Batch Summary

1718835

Volatile Organic Compounds

1718835-BLK1
1718835-BLK2
1718835-BS1
1718835-BS2
1718835-BSD1
1718835-BSD2
SC41135-01 (BCP-MW-6)
SC41135-02 (BCP-MW-1)
SC41135-03 (BCP-MW-7)
SC41135-05 (BCP-MW-5)
SC41135-06 (Trip Blank)

1718908

Volatile Organic Compounds

1718908-BLK1
1718908-BS1
1718908-BS2
1718908-BSD1
1718908-BSD2
SC41135-04 (BCP-MW-3)

S709132

Volatile Organic Compounds

S709132-CAL1
S709132-CAL2
S709132-CAL3
S709132-CAL4
S709132-CAL5
S709132-CAL6
S709132-CAL7
S709132-CAL8
S709132-CAL9
S709132-CALA
S709132-CALB
S709132-ICV1
S709132-LCV1
S709132-LCV2
S709132-TUN1

S709835

Volatile Organic Compounds

S709835-CCV1
S709835-TUN1

S709877

Volatile Organic Compounds

S709877-CCV1
S709877-TUN1

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

July 18, 2017

Cody Martin
C&S Companies
141 Elm Street
Suite 100
Buffalo, NY 14203

RE: Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Dear Cody Martin:
Enclosed are the analytical results for sample(s) received by the laboratory on July 08, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Murphy
james.murphy@pacelabs.com
(518)346-4592
Project Manager

Enclosures

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435
Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-1-070517 **Lab ID: 7023628001** Collected: 07/05/17 09:15 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**5.1**	ug/L	5.0	1		07/12/17 22:05	67-64-1	CC
Benzene	ND	ug/L	1.0	1		07/12/17 22:05	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/12/17 22:05	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/12/17 22:05	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/12/17 22:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/12/17 22:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/12/17 22:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		07/12/17 22:05	78-93-3	IL
n-Butylbenzene	ND	ug/L	1.0	1		07/12/17 22:05	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		07/12/17 22:05	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/12/17 22:05	98-06-6	
Carbon disulfide	ND	ug/L	1.0	1		07/12/17 22:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/12/17 22:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/12/17 22:05	108-90-7	
Chlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 22:05	75-45-6	N3
Chloroethane	ND	ug/L	1.0	1		07/12/17 22:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/12/17 22:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/12/17 22:05	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 22:05	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 22:05	106-43-4	
Dibromochloromethane	ND	ug/L	1.0	1		07/12/17 22:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/12/17 22:05	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/12/17 22:05	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:05	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		07/12/17 22:05	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 22:05	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/12/17 22:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/12/17 22:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/12/17 22:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 22:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 22:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 22:05	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/12/17 22:05	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 22:05	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/12/17 22:05	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 22:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 22:05	10061-02-6	L1
1,4-Diethylbenzene	ND	ug/L	1.0	1		07/12/17 22:05	105-05-5	N3
Ethanol	ND	ug/L	250	1		07/12/17 22:05	64-17-5	
Ethylbenzene	ND	ug/L	1.0	1		07/12/17 22:05	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/12/17 22:05	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		07/12/17 22:05	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/12/17 22:05	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/12/17 22:05	99-87-6	
Methylene Chloride	ND	ug/L	1.0	1		07/12/17 22:05	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-1-070517 **Lab ID: 7023628001** Collected: 07/05/17 09:15 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		07/12/17 22:05	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/12/17 22:05	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		07/12/17 22:05	91-20-3	CC
n-Propylbenzene	ND	ug/L	1.0	1		07/12/17 22:05	103-65-1	
Styrene	ND	ug/L	1.0	1		07/12/17 22:05	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 22:05	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 22:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/12/17 22:05	127-18-4	
1,2,4,5-tetramethylbenzene	ND	ug/L	1.0	1		07/12/17 22:05	95-93-2	N3
Toluene	ND	ug/L	1.0	1		07/12/17 22:05	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:05	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:05	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/12/17 22:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/12/17 22:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/12/17 22:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/12/17 22:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/12/17 22:05	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		07/12/17 22:05	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		07/12/17 22:05	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		07/12/17 22:05	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		07/12/17 22:05	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		07/12/17 22:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/12/17 22:05	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		07/12/17 22:05	17060-07-0	
4-Bromofluorobenzene (S)	97	%.	79-124	1		07/12/17 22:05	460-00-4	
Toluene-d8 (S)	91	%.	69-124	1		07/12/17 22:05	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-7-070517 **Lab ID: 7023628002** Collected: 07/05/17 09:58 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	ND	ug/L	5.0	1		07/12/17 22:24	67-64-1	CC
Benzene	**2.3**	ug/L	1.0	1		07/12/17 22:24	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/12/17 22:24	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/12/17 22:24	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/12/17 22:24	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/12/17 22:24	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/12/17 22:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		07/12/17 22:24	78-93-3	IL
n-Butylbenzene	ND	ug/L	1.0	1		07/12/17 22:24	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		07/12/17 22:24	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/12/17 22:24	98-06-6	
Carbon disulfide	ND	ug/L	1.0	1		07/12/17 22:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/12/17 22:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/12/17 22:24	108-90-7	
Chlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 22:24	75-45-6	N3
Chloroethane	ND	ug/L	1.0	1		07/12/17 22:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/12/17 22:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/12/17 22:24	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 22:24	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 22:24	106-43-4	
Dibromochloromethane	ND	ug/L	1.0	1		07/12/17 22:24	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/12/17 22:24	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/12/17 22:24	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:24	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		07/12/17 22:24	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 22:24	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/12/17 22:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/12/17 22:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/12/17 22:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 22:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 22:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 22:24	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/12/17 22:24	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 22:24	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/12/17 22:24	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 22:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 22:24	10061-02-6	L1
1,4-Diethylbenzene	ND	ug/L	1.0	1		07/12/17 22:24	105-05-5	N3
Ethanol	ND	ug/L	250	1		07/12/17 22:24	64-17-5	
Ethylbenzene	ND	ug/L	1.0	1		07/12/17 22:24	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/12/17 22:24	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		07/12/17 22:24	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/12/17 22:24	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/12/17 22:24	99-87-6	
Methylene Chloride	ND	ug/L	1.0	1		07/12/17 22:24	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-7-070517 **Lab ID: 7023628002** Collected: 07/05/17 09:58 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		07/12/17 22:24	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/12/17 22:24	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		07/12/17 22:24	91-20-3	CC
n-Propylbenzene	ND	ug/L	1.0	1		07/12/17 22:24	103-65-1	
Styrene	ND	ug/L	1.0	1		07/12/17 22:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 22:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 22:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/12/17 22:24	127-18-4	
1,2,4,5-tetramethylbenzene	ND	ug/L	1.0	1		07/12/17 22:24	95-93-2	N3
Toluene	ND	ug/L	1.0	1		07/12/17 22:24	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:24	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:24	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/12/17 22:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/12/17 22:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/12/17 22:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/12/17 22:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/12/17 22:24	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		07/12/17 22:24	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		07/12/17 22:24	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		07/12/17 22:24	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		07/12/17 22:24	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		07/12/17 22:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/12/17 22:24	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%.	68-153	1		07/12/17 22:24	17060-07-0	
4-Bromofluorobenzene (S)	97	%.	79-124	1		07/12/17 22:24	460-00-4	
Toluene-d8 (S)	92	%.	69-124	1		07/12/17 22:24	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-6-070517 **Lab ID: 7023628003** Collected: 07/05/17 11:10 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**102**	ug/L	5.0	1		07/12/17 22:42	67-64-1	CC
Benzene	**131**	ug/L	1.0	1		07/12/17 22:42	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/12/17 22:42	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/12/17 22:42	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/12/17 22:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/12/17 22:42	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/12/17 22:42	74-83-9	
2-Butanone (MEK)	**19.6**	ug/L	5.0	1		07/12/17 22:42	78-93-3	IL
n-Butylbenzene	**4.6**	ug/L	1.0	1		07/12/17 22:42	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		07/12/17 22:42	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/12/17 22:42	98-06-6	
Carbon disulfide	ND	ug/L	1.0	1		07/12/17 22:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/12/17 22:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/12/17 22:42	108-90-7	
Chlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 22:42	75-45-6	N3
Chloroethane	ND	ug/L	1.0	1		07/12/17 22:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/12/17 22:42	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/12/17 22:42	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 22:42	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 22:42	106-43-4	
Dibromochloromethane	ND	ug/L	1.0	1		07/12/17 22:42	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/12/17 22:42	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/12/17 22:42	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:42	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:42	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:42	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		07/12/17 22:42	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 22:42	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/12/17 22:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/12/17 22:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/12/17 22:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 22:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 22:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 22:42	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/12/17 22:42	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 22:42	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/12/17 22:42	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 22:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 22:42	10061-02-6	L1
1,4-Diethylbenzene	**32.9**	ug/L	1.0	1		07/12/17 22:42	105-05-5	N3
Ethanol	ND	ug/L	250	1		07/12/17 22:42	64-17-5	
Ethylbenzene	**85.5**	ug/L	1.0	1		07/12/17 22:42	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/12/17 22:42	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		07/12/17 22:42	591-78-6	
Isopropylbenzene (Cumene)	**2.5**	ug/L	1.0	1		07/12/17 22:42	98-82-8	
p-Isopropyltoluene	**1.6**	ug/L	1.0	1		07/12/17 22:42	99-87-6	
Methylene Chloride	ND	ug/L	1.0	1		07/12/17 22:42	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-6-070517 **Lab ID: 7023628003** Collected: 07/05/17 11:10 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	**6.2**	ug/L	5.0	1		07/12/17 22:42	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/12/17 22:42	1634-04-4	
Naphthalene	**86.6**	ug/L	1.0	1		07/12/17 22:42	91-20-3	CC
n-Propylbenzene	**11.3**	ug/L	1.0	1		07/12/17 22:42	103-65-1	
Styrene	ND	ug/L	1.0	1		07/12/17 22:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 22:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 22:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/12/17 22:42	127-18-4	
1,2,4,5-tetramethylbenzene	**14.3**	ug/L	1.0	1		07/12/17 22:42	95-93-2	N3
Toluene	**22.5**	ug/L	4.0	4		07/13/17 16:11	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:42	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 22:42	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/12/17 22:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/12/17 22:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/12/17 22:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/12/17 22:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/12/17 22:42	96-18-4	
1,2,4-Trimethylbenzene	**134**	ug/L	1.0	1		07/12/17 22:42	95-63-6	
1,3,5-Trimethylbenzene	**74.3**	ug/L	1.0	1		07/12/17 22:42	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		07/12/17 22:42	75-01-4	
Xylene (Total)	**438**	ug/L	8.0	4		07/13/17 16:11	1330-20-7	
m&p-Xylene	**361**	ug/L	2.0	1		07/12/17 22:42	179601-23-1	
o-Xylene	**77.4**	ug/L	4.0	4		07/13/17 16:11	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%.	68-153	1		07/12/17 22:42	17060-07-0	
4-Bromofluorobenzene (S)	94	%.	79-124	1		07/12/17 22:42	460-00-4	
Toluene-d8 (S)	93	%.	69-124	1		07/12/17 22:42	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-3-070517 **Lab ID: 7023628004** Collected: 07/05/17 12:00 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**166**	ug/L	10.0	2		07/13/17 17:23	67-64-1	
Benzene	**3.3**	ug/L	1.0	1		07/12/17 23:00	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/12/17 23:00	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/12/17 23:00	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/12/17 23:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/12/17 23:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/12/17 23:00	74-83-9	
2-Butanone (MEK)	**51.4**	ug/L	5.0	1		07/12/17 23:00	78-93-3	IL
n-Butylbenzene	ND	ug/L	1.0	1		07/12/17 23:00	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		07/12/17 23:00	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/12/17 23:00	98-06-6	
Carbon disulfide	ND	ug/L	1.0	1		07/12/17 23:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/12/17 23:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/12/17 23:00	108-90-7	
Chlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 23:00	75-45-6	N3
Chloroethane	ND	ug/L	1.0	1		07/12/17 23:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/12/17 23:00	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/12/17 23:00	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 23:00	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 23:00	106-43-4	
Dibromochloromethane	ND	ug/L	1.0	1		07/12/17 23:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/12/17 23:00	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/12/17 23:00	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:00	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		07/12/17 23:00	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 23:00	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/12/17 23:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/12/17 23:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/12/17 23:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 23:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 23:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 23:00	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/12/17 23:00	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 23:00	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/12/17 23:00	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 23:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 23:00	10061-02-6	L1
1,4-Diethylbenzene	ND	ug/L	1.0	1		07/12/17 23:00	105-05-5	N3
Ethanol	ND	ug/L	250	1		07/12/17 23:00	64-17-5	
Ethylbenzene	**2.4**	ug/L	1.0	1		07/12/17 23:00	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/12/17 23:00	87-68-3	
2-Hexanone	**8.0**	ug/L	5.0	1		07/12/17 23:00	591-78-6	CC
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/12/17 23:00	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/12/17 23:00	99-87-6	
Methylene Chloride	ND	ug/L	1.0	1		07/12/17 23:00	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-3-070517 **Lab ID: 7023628004** Collected: 07/05/17 12:00 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	**5.0**	ug/L	5.0	1		07/12/17 23:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/12/17 23:00	1634-04-4	
Naphthalene	**14.0**	ug/L	1.0	1		07/12/17 23:00	91-20-3	CC
n-Propylbenzene	ND	ug/L	1.0	1		07/12/17 23:00	103-65-1	
Styrene	ND	ug/L	1.0	1		07/12/17 23:00	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 23:00	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 23:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/12/17 23:00	127-18-4	
1,2,4,5-tetramethylbenzene	**1.1**	ug/L	1.0	1		07/12/17 23:00	95-93-2	N3
Toluene	**1.6**	ug/L	1.0	1		07/12/17 23:00	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:00	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/12/17 23:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/12/17 23:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/12/17 23:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/12/17 23:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/12/17 23:00	96-18-4	
1,2,4-Trimethylbenzene	**4.9**	ug/L	1.0	1		07/12/17 23:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		07/12/17 23:00	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		07/12/17 23:00	75-01-4	
Xylene (Total)	**7.1**	ug/L	2.0	1		07/12/17 23:00	1330-20-7	
m&p-Xylene	**5.8**	ug/L	2.0	1		07/12/17 23:00	179601-23-1	
o-Xylene	**1.3**	ug/L	1.0	1		07/12/17 23:00	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%.	68-153	1		07/12/17 23:00	17060-07-0	
4-Bromofluorobenzene (S)	92	%.	79-124	1		07/12/17 23:00	460-00-4	
Toluene-d8 (S)	92	%.	69-124	1		07/12/17 23:00	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-4-070517 **Lab ID: 7023628005** Collected: 07/05/17 13:00 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**38.2**	ug/L	5.0	1		07/12/17 23:18	67-64-1	CC
Benzene	**1.3**	ug/L	1.0	1		07/12/17 23:18	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/12/17 23:18	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/12/17 23:18	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/12/17 23:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/12/17 23:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/12/17 23:18	74-83-9	
2-Butanone (MEK)	**6.9**	ug/L	5.0	1		07/12/17 23:18	78-93-3	IL
n-Butylbenzene	**1.7**	ug/L	1.0	1		07/12/17 23:18	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		07/12/17 23:18	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/12/17 23:18	98-06-6	
Carbon disulfide	ND	ug/L	1.0	1		07/12/17 23:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/12/17 23:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/12/17 23:18	108-90-7	
Chlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 23:18	75-45-6	N3
Chloroethane	ND	ug/L	1.0	1		07/12/17 23:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/12/17 23:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/12/17 23:18	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 23:18	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 23:18	106-43-4	
Dibromochloromethane	ND	ug/L	1.0	1		07/12/17 23:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/12/17 23:18	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/12/17 23:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:18	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		07/12/17 23:18	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 23:18	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/12/17 23:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/12/17 23:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/12/17 23:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 23:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 23:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 23:18	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/12/17 23:18	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 23:18	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/12/17 23:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 23:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 23:18	10061-02-6	L1
1,4-Diethylbenzene	**2.5**	ug/L	1.0	1		07/12/17 23:18	105-05-5	N3
Ethanol	ND	ug/L	250	1		07/12/17 23:18	64-17-5	
Ethylbenzene	**28.0**	ug/L	1.0	1		07/12/17 23:18	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/12/17 23:18	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		07/12/17 23:18	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/12/17 23:18	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/12/17 23:18	99-87-6	
Methylene Chloride	ND	ug/L	1.0	1		07/12/17 23:18	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-4-070517 **Lab ID: 7023628005** Collected: 07/05/17 13:00 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	**9.8**	ug/L	5.0	1		07/12/17 23:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/12/17 23:18	1634-04-4	
Naphthalene	**1.9**	ug/L	1.0	1		07/12/17 23:18	91-20-3	CC
n-Propylbenzene	**2.3**	ug/L	1.0	1		07/12/17 23:18	103-65-1	
Styrene	ND	ug/L	1.0	1		07/12/17 23:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 23:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 23:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/12/17 23:18	127-18-4	
1,2,4,5-tetramethylbenzene	**1.1**	ug/L	1.0	1		07/12/17 23:18	95-93-2	N3
Toluene	**9.8**	ug/L	1.0	1		07/12/17 23:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/12/17 23:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/12/17 23:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/12/17 23:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/12/17 23:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/12/17 23:18	96-18-4	
1,2,4-Trimethylbenzene	**1.1**	ug/L	1.0	1		07/12/17 23:18	95-63-6	
1,3,5-Trimethylbenzene	**2.0**	ug/L	1.0	1		07/12/17 23:18	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		07/12/17 23:18	75-01-4	
Xylene (Total)	**24.5**	ug/L	2.0	1		07/12/17 23:18	1330-20-7	
m&p-Xylene	**22.1**	ug/L	2.0	1		07/12/17 23:18	179601-23-1	
o-Xylene	**2.4**	ug/L	1.0	1		07/12/17 23:18	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%.	68-153	1		07/12/17 23:18	17060-07-0	
4-Bromofluorobenzene (S)	97	%.	79-124	1		07/12/17 23:18	460-00-4	
Toluene-d8 (S)	92	%.	69-124	1		07/12/17 23:18	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-5-070517 **Lab ID: 7023628006** Collected: 07/05/17 14:15 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**15.3**	ug/L	5.0	1		07/12/17 23:36	67-64-1	CC
Benzene	**574**	ug/L	25.0	25		07/13/17 16:29	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/12/17 23:36	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/12/17 23:36	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/12/17 23:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/12/17 23:36	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/12/17 23:36	74-83-9	
2-Butanone (MEK)	**5.1**	ug/L	5.0	1		07/12/17 23:36	78-93-3	IL
n-Butylbenzene	**43.3**	ug/L	1.0	1		07/12/17 23:36	104-51-8	
sec-Butylbenzene	**3.2**	ug/L	1.0	1		07/12/17 23:36	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/12/17 23:36	98-06-6	
Carbon disulfide	**2.1**	ug/L	1.0	1		07/12/17 23:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/12/17 23:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/12/17 23:36	108-90-7	
Chlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 23:36	75-45-6	N3
Chloroethane	ND	ug/L	1.0	1		07/12/17 23:36	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/12/17 23:36	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/12/17 23:36	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 23:36	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/12/17 23:36	106-43-4	
Dibromochloromethane	ND	ug/L	1.0	1		07/12/17 23:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/12/17 23:36	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/12/17 23:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:36	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		07/12/17 23:36	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/12/17 23:36	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/12/17 23:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/12/17 23:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/12/17 23:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 23:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/12/17 23:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 23:36	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/12/17 23:36	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/12/17 23:36	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/12/17 23:36	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 23:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/12/17 23:36	10061-02-6	L1
1,4-Diethylbenzene	**347**	ug/L	25.0	25		07/13/17 16:29	105-05-5	N3
Ethanol	ND	ug/L	250	1		07/12/17 23:36	64-17-5	
Ethylbenzene	**534**	ug/L	25.0	25		07/13/17 16:29	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/12/17 23:36	87-68-3	
2-Hexanone	**5.9**	ug/L	5.0	1		07/12/17 23:36	591-78-6	CC
Isopropylbenzene (Cumene)	**13.6**	ug/L	1.0	1		07/12/17 23:36	98-82-8	
p-Isopropyltoluene	**5.7**	ug/L	1.0	1		07/12/17 23:36	99-87-6	
Methylene Chloride	ND	ug/L	1.0	1		07/12/17 23:36	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Sample: BCP-MW-5-070517 **Lab ID: 7023628006** Collected: 07/05/17 14:15 Received: 07/08/17 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		07/12/17 23:36	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/12/17 23:36	1634-04-4	
Naphthalene	**730**	ug/L	25.0	25		07/13/17 16:29	91-20-3	
n-Propylbenzene	**34.8**	ug/L	1.0	1		07/12/17 23:36	103-65-1	
Styrene	ND	ug/L	1.0	1		07/12/17 23:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 23:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/12/17 23:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/12/17 23:36	127-18-4	
1,2,4,5-tetramethylbenzene	**135**	ug/L	1.0	1		07/12/17 23:36	95-93-2	N3
Toluene	**36.2**	ug/L	1.0	1		07/12/17 23:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/12/17 23:36	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/12/17 23:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/12/17 23:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/12/17 23:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/12/17 23:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/12/17 23:36	96-18-4	
1,2,4-Trimethylbenzene	**2280**	ug/L	25.0	25		07/13/17 16:29	95-63-6	
1,3,5-Trimethylbenzene	**823**	ug/L	25.0	25		07/13/17 16:29	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		07/12/17 23:36	75-01-4	
Xylene (Total)	**4520**	ug/L	50.0	25		07/13/17 16:29	1330-20-7	
m&p-Xylene	**4350**	ug/L	50.0	25		07/13/17 16:29	179601-23-1	
o-Xylene	**171**	ug/L	1.0	1		07/12/17 23:36	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%.	68-153	1		07/12/17 23:36	17060-07-0	
4-Bromofluorobenzene (S)	93	%.	79-124	1		07/12/17 23:36	460-00-4	
Toluene-d8 (S)	88	%.	69-124	1		07/12/17 23:36	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

QC Batch: 31241 Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV
Associated Lab Samples: 7023628001, 7023628002, 7023628003, 7023628004, 7023628005, 7023628006

METHOD BLANK: 144636 Matrix: Water
Associated Lab Samples: 7023628001, 7023628002, 7023628003, 7023628004, 7023628005, 7023628006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/12/17 17:32	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/12/17 17:32	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/12/17 17:32	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/12/17 17:32	
1,1-Dichloroethane	ug/L	ND	1.0	07/12/17 17:32	
1,1-Dichloroethene	ug/L	ND	1.0	07/12/17 17:32	
1,1-Dichloropropene	ug/L	ND	1.0	07/12/17 17:32	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/12/17 17:32	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/12/17 17:32	
1,2,4,5-tetramethylbenzene	ug/L	ND	1.0	07/12/17 17:32	N3
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/12/17 17:32	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/12/17 17:32	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/12/17 17:32	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/12/17 17:32	
1,2-Dichloroethane	ug/L	ND	1.0	07/12/17 17:32	
1,2-Dichloropropane	ug/L	ND	1.0	07/12/17 17:32	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/12/17 17:32	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/12/17 17:32	
1,3-Dichloropropane	ug/L	ND	1.0	07/12/17 17:32	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/12/17 17:32	
1,4-Diethylbenzene	ug/L	ND	1.0	07/12/17 17:32	N3
2,2-Dichloropropane	ug/L	ND	1.0	07/12/17 17:32	
2-Butanone (MEK)	ug/L	ND	5.0	07/12/17 17:32	IL
2-Chlorotoluene	ug/L	ND	1.0	07/12/17 17:32	
2-Hexanone	ug/L	ND	5.0	07/12/17 17:32	
4-Chlorotoluene	ug/L	ND	1.0	07/12/17 17:32	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	07/12/17 17:32	
Acetone	ug/L	ND	5.0	07/12/17 17:32	
Benzene	ug/L	ND	1.0	07/12/17 17:32	
Bromobenzene	ug/L	ND	1.0	07/12/17 17:32	
Bromochloromethane	ug/L	ND	1.0	07/12/17 17:32	
Bromodichloromethane	ug/L	ND	1.0	07/12/17 17:32	
Bromoform	ug/L	ND	1.0	07/12/17 17:32	
Bromomethane	ug/L	ND	1.0	07/12/17 17:32	
Carbon disulfide	ug/L	ND	1.0	07/12/17 17:32	
Carbon tetrachloride	ug/L	ND	1.0	07/12/17 17:32	
Chlorobenzene	ug/L	ND	1.0	07/12/17 17:32	
Chlorodifluoromethane	ug/L	ND	1.0	07/12/17 17:32	N3
Chloroethane	ug/L	ND	1.0	07/12/17 17:32	
Chloroform	ug/L	ND	1.0	07/12/17 17:32	
Chloromethane	ug/L	ND	1.0	07/12/17 17:32	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

METHOD BLANK: 144636 Matrix: Water
Associated Lab Samples: 7023628001, 7023628002, 7023628003, 7023628004, 7023628005, 7023628006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/12/17 17:32	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/12/17 17:32	
Dibromochloromethane	ug/L	ND	1.0	07/12/17 17:32	
Dibromomethane	ug/L	ND	1.0	07/12/17 17:32	
Dichlorodifluoromethane	ug/L	ND	1.0	07/12/17 17:32	
Ethanol	ug/L	ND	250	07/12/17 17:32	
Ethylbenzene	ug/L	ND	1.0	07/12/17 17:32	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	07/12/17 17:32	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/12/17 17:32	
m&p-Xylene	ug/L	ND	2.0	07/12/17 17:32	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/12/17 17:32	
Methylene Chloride	ug/L	ND	1.0	07/12/17 17:32	
n-Butylbenzene	ug/L	ND	1.0	07/12/17 17:32	
n-Propylbenzene	ug/L	ND	1.0	07/12/17 17:32	
Naphthalene	ug/L	ND	1.0	07/12/17 17:32	CC
o-Xylene	ug/L	ND	1.0	07/12/17 17:32	
p-Isopropyltoluene	ug/L	ND	1.0	07/12/17 17:32	
sec-Butylbenzene	ug/L	ND	1.0	07/12/17 17:32	
Styrene	ug/L	ND	1.0	07/12/17 17:32	
tert-Butylbenzene	ug/L	ND	1.0	07/12/17 17:32	
Tetrachloroethene	ug/L	ND	1.0	07/12/17 17:32	
Toluene	ug/L	ND	1.0	07/12/17 17:32	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/12/17 17:32	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/12/17 17:32	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	07/12/17 17:32	
Trichloroethene	ug/L	ND	1.0	07/12/17 17:32	
Trichlorofluoromethane	ug/L	ND	1.0	07/12/17 17:32	
Vinyl chloride	ug/L	ND	1.0	07/12/17 17:32	
Xylene (Total)	ug/L	ND	2.0	07/12/17 17:32	
1,2-Dichloroethane-d4 (S)	%.	87	68-153	07/12/17 17:32	
4-Bromofluorobenzene (S)	%.	98	79-124	07/12/17 17:32	
Toluene-d8 (S)	%.	94	69-124	07/12/17 17:32	

LABORATORY CONTROL SAMPLE: 144637

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	54.2	108	74-113	
1,1,1-Trichloroethane	ug/L	50	53.4	107	65-118	
1,1,2,2-Tetrachloroethane	ug/L	50	46.0	92	74-121	
1,1,2-Trichloroethane	ug/L	50	49.9	100	80-117	
1,1-Dichloroethane	ug/L	50	51.5	103	83-151	
1,1-Dichloroethene	ug/L	50	53.4	107	45-146	
1,1-Dichloropropene	ug/L	50	52.5	105	59-127	
1,2,3-Trichlorobenzene	ug/L	50	42.4	85	67-103	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

LABORATORY CONTROL SAMPLE: 144637

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,3-Trichloropropane	ug/L	50	45.1	90	71-123	
1,2,4,5-tetramethylbenzene	ug/L	50	37.0	74	66-103	N3
1,2,4-Trichlorobenzene	ug/L	50	44.3	89	66-116	
1,2,4-Trimethylbenzene	ug/L	50	43.9	88	68-116	
1,2-Dibromoethane (EDB)	ug/L	50	53.8	108	83-115	
1,2-Dichlorobenzene	ug/L	50	45.6	91	74-113	
1,2-Dichloroethane	ug/L	50	48.8	98	74-129	
1,2-Dichloropropane	ug/L	50	50.5	101	75-117	
1,3,5-Trimethylbenzene	ug/L	50	44.0	88	67-116	
1,3-Dichlorobenzene	ug/L	50	45.0	90	71-112	
1,3-Dichloropropane	ug/L	50	49.7	99	74-112	
1,4-Dichlorobenzene	ug/L	50	44.9	90	71-113	
1,4-Diethylbenzene	ug/L	50	46.2	92	56-130	N3
2,2-Dichloropropane	ug/L	50	58.1	116	63-133	
2-Butanone (MEK)	ug/L	50	50.7	101	44-162	IL
2-Chlorotoluene	ug/L	50	43.0	86	74-101	
2-Hexanone	ug/L	50	59.0	118	32-183	CC
4-Chlorotoluene	ug/L	50	43.4	87	74-101	
4-Methyl-2-pentanone (MIBK)	ug/L	50	54.6	109	69-132	
Acetone	ug/L	50	53.6	107	23-188	CC
Benzene	ug/L	50	51.7	103	73-119	
Bromobenzene	ug/L	50	46.6	93	72-102	
Bromochloromethane	ug/L	50	55.2	110	81-116	
Bromodichloromethane	ug/L	50	51.6	103	78-117	
Bromoform	ug/L	50	53.7	107	65-122	
Bromomethane	ug/L	50	55.0	110	52-147	
Carbon disulfide	ug/L	50	46.6	93	41-144	
Carbon tetrachloride	ug/L	50	56.6	113	59-120	
Chlorobenzene	ug/L	50	50.6	101	75-113	
Chlorodifluoromethane	ug/L	50	48.4	97	43-140	N3
Chloroethane	ug/L	50	47.2	94	49-151	
Chloroform	ug/L	50	50.5	101	72-122	
Chloromethane	ug/L	50	46.2	92	46-144	
cis-1,2-Dichloroethene	ug/L	50	51.6	103	72-121	
cis-1,3-Dichloropropene	ug/L	50	55.9	112	78-116	
Dibromochloromethane	ug/L	50	54.4	109	70-120	
Dibromomethane	ug/L	50	50.0	100	75-125	
Dichlorodifluoromethane	ug/L	50	65.8	132	22-154	CC
Ethanol	ug/L	1250	1150	92	10-151	
Ethylbenzene	ug/L	50	51.3	103	70-113	
Hexachloro-1,3-butadiene	ug/L	50	54.3	109	59-121	CC
Isopropylbenzene (Cumene)	ug/L	50	45.0	90	67-115	
m&p-Xylene	ug/L	100	106	106	72-115	
Methyl-tert-butyl ether	ug/L	50	50.4	101	72-131	
Methylene Chloride	ug/L	50	49.1	98	61-142	
n-Butylbenzene	ug/L	50	45.4	91	73-107	
n-Propylbenzene	ug/L	50	44.1	88	68-116	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

LABORATORY CONTROL SAMPLE: 144637

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/L	50	35.3	71	70-118	CC
o-Xylene	ug/L	50	52.1	104	73-117	
p-Isopropyltoluene	ug/L	50	46.2	92	73-101	
sec-Butylbenzene	ug/L	50	45.6	91	72-103	
Styrene	ug/L	50	51.8	104	72-118	
tert-Butylbenzene	ug/L	50	45.7	91	68-100	
Tetrachloroethene	ug/L	50	46.7	93	60-128	
Toluene	ug/L	50	51.3	103	72-119	
trans-1,2-Dichloroethene	ug/L	50	53.5	107	56-142	
trans-1,3-Dichloropropene	ug/L	50	59.1	118	79-116	L1
trans-1,4-Dichloro-2-butene	ug/L	50	46.3	93	71-121	
Trichloroethene	ug/L	50	50.7	101	69-117	
Trichlorofluoromethane	ug/L	50	52.6	105	27-173	
Vinyl chloride	ug/L	50	51.1	102	43-143	
Xylene (Total)	ug/L	150	159	106	71-109	
1,2-Dichloroethane-d4 (S)	%.			87	68-153	
4-Bromofluorobenzene (S)	%.			99	79-124	
Toluene-d8 (S)	%.			93	69-124	

MATRIX SPIKE SAMPLE: 146135

Parameter	Units	7023780002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	50	50.2	100	74-113	
1,1,1-Trichloroethane	ug/L	<1.0	50	50.9	102	65-118	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	50	47.0	94	74-121	
1,1,2-Trichloroethane	ug/L	<1.0	50	50.9	102	80-117	
1,1-Dichloroethane	ug/L	<1.0	50	51.9	104	83-151	
1,1-Dichloroethene	ug/L	<1.0	50	56.1	112	45-146	
1,1-Dichloropropene	ug/L	<1.0	50	51.1	102	59-127	
1,2,3-Trichlorobenzene	ug/L	<1.0	50	42.4	85	67-103	
1,2,3-Trichloropropane	ug/L	<1.0	50	46.2	92	71-123	
1,2,4,5-tetramethylbenzene	ug/L	<1.0	50	38.6	77	66-103	N3
1,2,4-Trichlorobenzene	ug/L	<1.0	50	44.2	88	66-116	
1,2,4-Trimethylbenzene	ug/L	<1.0	50	51.5	103	68-116	
1,2-Dibromoethane (EDB)	ug/L	<1.0	50	54.2	108	83-115	
1,2-Dichlorobenzene	ug/L	<1.0	50	45.5	91	74-113	
1,2-Dichloroethane	ug/L	<1.0	50	50.2	100	74-129	
1,2-Dichloropropane	ug/L	<1.0	50	49.0	98	75-117	
1,3,5-Trimethylbenzene	ug/L	<1.0	50	47.4	95	67-116	
1,3-Dichlorobenzene	ug/L	<1.0	50	43.8	88	71-112	
1,3-Dichloropropane	ug/L	<1.0	50	49.5	99	74-112	
1,4-Dichlorobenzene	ug/L	<1.0	50	43.7	87	71-113	
1,4-Diethylbenzene	ug/L	<1.0	50	51.0	102	56-130	N3
2,2-Dichloropropane	ug/L	<1.0	50	51.0	102	63-133	
2-Butanone (MEK)	ug/L	<5.0	50	48.9	98	44-162	IL

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

MATRIX SPIKE SAMPLE: 146135

Parameter	Units	7023780002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2-Chlorotoluene	ug/L	<1.0	50	42.4	85	74-101	
2-Hexanone	ug/L	<5.0	50	60.3	121	32-183	CC
4-Chlorotoluene	ug/L	<1.0	50	41.5	83	74-101	
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	50	58.6	117	69-132	
Acetone	ug/L	41.8	50	64.9	46	23-188	CC
Benzene	ug/L	<1.0	50	51.4	103	73-119	
Bromobenzene	ug/L	<1.0	50	45.1	90	72-102	
Bromochloromethane	ug/L	<1.0	50	56.6	113	81-116	
Bromodichloromethane	ug/L	<1.0	50	49.1	98	78-117	
Bromoform	ug/L	<1.0	50	49.4	99	65-122	
Bromomethane	ug/L	<1.0	50	54.0	108	52-147	
Carbon disulfide	ug/L	<1.0	50	47.3	95	41-144	
Carbon tetrachloride	ug/L	<1.0	50	50.5	101	59-120	
Chlorobenzene	ug/L	<1.0	50	49.1	98	75-113	
Chlorodifluoromethane	ug/L	<1.0	50	48.1	96	43-140	N3
Chloroethane	ug/L	<1.0	50	46.5	93	49-151	
Chloroform	ug/L	<1.0	50	50.9	102	72-122	
Chloromethane	ug/L	<1.0	50	46.1	92	46-144	
cis-1,2-Dichloroethene	ug/L	<1.0	50	51.2	102	72-121	
cis-1,3-Dichloropropene	ug/L	<1.0	50	53.3	107	78-116	
Dibromochloromethane	ug/L	<1.0	50	49.9	100	70-120	
Dibromomethane	ug/L	<1.0	50	51.6	103	75-125	
Dichlorodifluoromethane	ug/L	<1.0	50	61.7	123	22-154	CC
Ethanol	ug/L	<250	1250	1190	95	10-151	
Ethylbenzene	ug/L	<1.0	50	50.5	101	70-113	
Hexachloro-1,3-butadiene	ug/L	<1.0	50	45.4	91	59-121	CC
Isopropylbenzene (Cumene)	ug/L	<1.0	50	43.2	86	67-115	
m&p-Xylene	ug/L	<2.0	100	119	119	72-115	M1
Methyl-tert-butyl ether	ug/L	<1.0	50	52.7	105	72-131	
Methylene Chloride	ug/L	<1.0	50	49.5	99	61-142	
n-Butylbenzene	ug/L	<1.0	50	43.1	86	73-107	
n-Propylbenzene	ug/L	<1.0	50	42.3	85	68-116	
Naphthalene	ug/L	<1.0	50	63.1	126	70-118	CC,M1
o-Xylene	ug/L	<1.0	50	61.6	123	73-117	M1
p-Isopropyltoluene	ug/L	<1.0	50	42.7	85	73-101	
sec-Butylbenzene	ug/L	<1.0	50	43.3	87	72-103	
Styrene	ug/L	<1.0	50	50.2	100	72-118	
tert-Butylbenzene	ug/L	<1.0	50	43.8	88	68-100	
Tetrachloroethene	ug/L	<1.0	50	44.7	89	60-128	
Toluene	ug/L	<1.0	50	52.5	105	72-119	
trans-1,2-Dichloroethene	ug/L	<1.0	50	53.5	107	56-142	
trans-1,3-Dichloropropene	ug/L	<1.0	50	55.7	111	79-116	
trans-1,4-Dichloro-2-butene	ug/L	<1.0	50	43.4	87	71-121	
Trichloroethene	ug/L	<1.0	50	49.9	100	69-117	
Trichlorofluoromethane	ug/L	<1.0	50	52.6	105	27-173	
Vinyl chloride	ug/L	<1.0	50	52.0	104	43-143	
Xylene (Total)	ug/L	<2.0	150	180	120	71-109	MS

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

MATRIX SPIKE SAMPLE: 146135

Parameter	Units	7023780002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%.				87	68-153	
4-Bromofluorobenzene (S)	%.				99	79-124	
Toluene-d8 (S)	%.				93	69-124	

SAMPLE DUPLICATE: 146134

Parameter	Units	7023780001 Result	Dup Result	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	ND		
1,1,1-Trichloroethane	ug/L	<1.0	ND		
1,1,2,2-Tetrachloroethane	ug/L	<1.0	ND		
1,1,2-Trichloroethane	ug/L	<1.0	ND		
1,1-Dichloroethane	ug/L	<1.0	ND		
1,1-Dichloroethene	ug/L	<1.0	ND		
1,1-Dichloropropene	ug/L	<1.0	ND		
1,2,3-Trichlorobenzene	ug/L	<1.0	ND		
1,2,3-Trichloropropane	ug/L	<1.0	ND		
1,2,4,5-tetramethylbenzene	ug/L	<1.0	ND		N3
1,2,4-Trichlorobenzene	ug/L	<1.0	ND		
1,2,4-Trimethylbenzene	ug/L	<1.0	ND		
1,2-Dibromoethane (EDB)	ug/L	<1.0	ND		
1,2-Dichlorobenzene	ug/L	<1.0	ND		
1,2-Dichloroethane	ug/L	<1.0	ND		
1,2-Dichloropropane	ug/L	<1.0	ND		
1,3,5-Trimethylbenzene	ug/L	<1.0	ND		
1,3-Dichlorobenzene	ug/L	<1.0	ND		
1,3-Dichloropropane	ug/L	<1.0	ND		
1,4-Dichlorobenzene	ug/L	<1.0	ND		
1,4-Diethylbenzene	ug/L	<1.0	ND		N3
2,2-Dichloropropane	ug/L	<1.0	ND		
2-Butanone (MEK)	ug/L	<5.0	ND		IL
2-Chlorotoluene	ug/L	<1.0	ND		
2-Hexanone	ug/L	<5.0	ND		
4-Chlorotoluene	ug/L	<1.0	ND		
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	ND		
Acetone	ug/L	<5.0	ND		
Benzene	ug/L	<1.0	ND		
Bromobenzene	ug/L	<1.0	ND		
Bromochloromethane	ug/L	<1.0	ND		
Bromodichloromethane	ug/L	<1.0	ND		
Bromoform	ug/L	<1.0	ND		
Bromomethane	ug/L	<1.0	ND		
Carbon disulfide	ug/L	<1.0	ND		
Carbon tetrachloride	ug/L	<1.0	ND		
Chlorobenzene	ug/L	<1.0	ND		
Chlorodifluoromethane	ug/L	<1.0	ND		N3

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

SAMPLE DUPLICATE: 146134

Parameter	Units	7023780001 Result	Dup Result	RPD	Qualifiers
Chloroethane	ug/L	<1.0	ND		
Chloroform	ug/L	<1.0	ND		
Chloromethane	ug/L	<1.0	ND		
cis-1,2-Dichloroethene	ug/L	<1.0	ND		
cis-1,3-Dichloropropene	ug/L	<1.0	ND		
Dibromochloromethane	ug/L	<1.0	ND		
Dibromomethane	ug/L	<1.0	ND		
Dichlorodifluoromethane	ug/L	<1.0	ND		
Ethanol	ug/L	<250	ND		
Ethylbenzene	ug/L	<1.0	ND		
Hexachloro-1,3-butadiene	ug/L	<1.0	ND		
Isopropylbenzene (Cumene)	ug/L	<1.0	ND		
m&p-Xylene	ug/L	<2.0	ND		
Methyl-tert-butyl ether	ug/L	<1.0	ND		
Methylene Chloride	ug/L	<1.0	ND		
n-Butylbenzene	ug/L	<1.0	ND		
n-Propylbenzene	ug/L	<1.0	ND		
Naphthalene	ug/L	<1.0	ND		CC
o-Xylene	ug/L	<1.0	ND		
p-Isopropyltoluene	ug/L	<1.0	ND		
sec-Butylbenzene	ug/L	<1.0	ND		
Styrene	ug/L	<1.0	ND		
tert-Butylbenzene	ug/L	<1.0	ND		
Tetrachloroethene	ug/L	<1.0	ND		
Toluene	ug/L	<1.0	ND		
trans-1,2-Dichloroethene	ug/L	<1.0	ND		
trans-1,3-Dichloropropene	ug/L	<1.0	ND		
trans-1,4-Dichloro-2-butene	ug/L	<1.0	ND		
Trichloroethene	ug/L	<1.0	ND		
Trichlorofluoromethane	ug/L	<1.0	ND		
Vinyl chloride	ug/L	<1.0	ND		
Xylene (Total)	ug/L	<2.0	ND		
1,2-Dichloroethane-d4 (S)	%.	88	89	1	
4-Bromofluorobenzene (S)	%.	96	96	0	
Toluene-d8 (S)	%.	92	92	0	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALIFIERS

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

CC	The continuing calibration for this compound is outside of method control limits. The result is estimated.
IL	This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CONVENTUS #N46001001
Pace Project No.: 7023628

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7023628001	**BCP-MW-1-070517**	EPA 8260C/5030C	31241		
7023628002	**BCP-MW-7-070517**	EPA 8260C/5030C	31241		
7023628003	**BCP-MW-6-070517**	EPA 8260C/5030C	31241		
7023628004	**BCP-MW-3-070517**	EPA 8260C/5030C	31241		
7023628005	**BCP-MW-4-070517**	EPA 8260C/5030C	31241		
7023628006	**BCP-MW-5-070517**	EPA 8260C/5030C	31241		

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must

WO#: 7023628

7023628

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: C&S Engineers	Report To: Cody Martin	Attention: Cody Martin
Address: 141 Elm Street	Copy To:	Company Name: C&S Engineers
		Address: 141 Elm Street
Email To: CMartin@cscos.com	Purchase Order No.:	Pace Quote Reference:
Phone: 7169552021 Fax:	Project Name: Conventus	Pace Project Manager:
Requested Due Date/TAT: Standard	Project Number: N46000100L	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: NY

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	TCL VOC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	BCP-MW-1-070517		WT	G			7/5/17	9:15		2				X						X		
2	BCP-MW-7-070517							9:58														
3	BCP-MW-6-070517							11:10														
4	BCP-MW-3-070517							12:00														
5	BCP-MW-4-070517							13:00														
6	BCP-MW-5-070517							14:15														
7	MSMW																					
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Cody Martin C&S	7/6/17	10:35	PACE	7/7/17	1039	
		7/7/17	1700		7/8/17	10:20	2.3 4 5 4

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Cody Martin

SIGNATURE of SAMPLER: Cody Martin DATE Signed (MM/DD/YY): 07/6/17

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
2.3	4	5	4

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical™ Long Island Laboratory

Sample Condition Upon Rec

WO#: 7023628
PM: JM1 Due Date: 07/19/17
CLIENT: CSC

Client Name: CSC Proje

Courier: X Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 7795 8129 0644

Custody Seal on Cooler/Box Present: X Yes ☐ No Seals Intact: X Yes ☐ No

Packing Material: ☐ Bubble Wrap X Bubble Bags ☐ Ziploc ☐ None ☐ Other Type of Ice: (Wet) Blue None

Thermometer Used: TH092 Correction Factor: 0 ☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): 2.3 Cooler Temperature Corrected (°C): 2.3 Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (X N/A, water sample) Date and Initials of person examining contents: JK 7/18/17

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ YES ☐ NO

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes X No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☐Yes	☐No		1.
Chain of Custody Filled Out:	☐Yes	☐No		2.
Chain of Custody Relinquished:	☐Yes	☐No		3.
Sampler Name & Signature on COC:	☐Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☐Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☐No		6.
Rush Turn Around Time Requested:	☐Yes	☐No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☐Yes	☐No		8.
Correct Containers Used:	☐Yes	☐No		9.
-Pace Containers Used:	☐Yes	☐No		
Containers Intact:	☐Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☐N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: SL WT OIL	☐Yes	☐No		12.
All containers needing preservation have been checked pH paper Lot #	☐Yes	☐No	☐N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NaOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☐Yes	☐No	☐N/A	Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination: Residual chlorine strips Lot #	☐Yes	☐No	☐N/A	14. Positive for Res. Chlorine? Y N
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☐N/A	15.
Trip Blank Present:	☐Yes	☐No	☐N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

*** PM (Project Manager) review is documented electronically in LIMS.**

F-LI-C-002-rev.01

APPENDIX C

GROUNDWATER MONITORING LOGS

C&S Engineers, Inc.
141 Elm Street Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
www.cscos.com

Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		7/5/17							
Well Number		BCP MW-1							
Diameter (inches)		2							
Total Sounded Depth (feet)		14.5							
Static Water Level (feet)		6.7							
H_2O Column (feet)		7.8							
Pump Intake (feet)		7							
Well Volume (gallons)		1.326							
Amount to Evacuate (gallons)		3.978							
Amount Evacuated (gallons)									

FIELD READINGS

Date	Stabilization Criteria								
Time		9:07	9:11	9:13	9:15				
pH (Std. Units)	+/-0.1	7.65	7.42	7.41	7.41 ✓				
Conductivity (mS/cm)	3%	4.82	4.63	4.5	4.69 ✓				
Turbidity (NTU)	10%	21.6	11.7	5.5 ✓	5.3 ✓				
D.O. (mg/L)	10%	2.13	0.80	0.67	0.66 ✓				
Temperature (°C) (°F)	3%	14.87	13.75	13.63	13.6 ✓				
ORP[3](mV)	+/-10 mv	-172	-161	-161 ✓	-161 ✓				
Appearance		C	C	C	C				
Free Product (Yes/No)		N	N	N	N				
Odor		N	N	N	N				
Comments		6.7'	6.75'	6.75'	6.75'				
			0.5gal	0.75gal	1gal				

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

Headspace - 0 ppm

Sampled 9:15

C&S Engineers, Inc.
141 Elm Street Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
www.cscos.com

Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		2/5/17							
Well Number		BCP-MW-7							
Diameter (inches)		2							
Total Sounded Depth (feet)		15.1							
Static Water Level (feet)		10.13							
H_2O Column (feet)		4.97							
Pump Intake (feet)		12							
Well Volume (gallons)		0.8449							
Amount to Evacuate (gallons)		2.5347							
Amount Evacuated (gallons)									

FIELD READINGS

Date	Stabilization Criteria								
Time		9:45	9:47	9:51	9:53	9:58			
pH (Std. Units)	+/-0.1	7.29	7.24	7.21	7.21 ✓	7.22			
Conductivity (mS/cm)	3%	3.61	3.60	3.64	3.71 ✓	3.80			
Turbidity (NTU)	10%	136	125	96.8	71.1	52 ✓			
D.O. (mg/L)	10%	1.39	0.79	1.26	2.00 ✓	2.10			
Temperature (°C) (°F)	3%	15.01	14.68	14.85	14.50 ✓	14.45			
ORP[3](mV)	+/-10 mv	85	72	64	61 ✓	58			
Appearance		C	C	C	C	C			
Free Product (Yes/No)		N	N	N	N	N			
Odor		N	N	N	N	N			
Comments		10.05'→10.8'		10.8'	10.8'	10.81			
		0.5gal	0.75gal	1gal	1.5gal				

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

Headspace - 0 ppm

Sample at 9:58

C&S Engineers, Inc.
141 Elm Street Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
www.cscos.com

Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		2/5/17							
Well Number		MW-6							
Diameter (inches)		8							
Total Sounded Depth (feet)		13.85							
Static Water Level (feet)		6.75							
H_2O Column (feet)		7.1							
Pump Intake (feet)		8							
Well Volume (gallons)		18.46							
Amount to Evacuate (gallons)									
Amount Evacuated (gallons)									

FIELD READINGS

	Stabilization Criteria									
Time		10:38	10:42	10:46	10:48	10:53	10:57	11:00	11:02	11:10
pH (Std. Units)	+/-0.1	10.76	10.97	10.95	10.94	10.94	10.94	10.94	10.92	10.93
Conductivity (mS/cm)	3%	63	64.9	62.4	62.2	61.6	60.6	57.6	53.2	53.9
Turbidity (NTU)	10%	11.6	249	122	43.1	71.7	142	114	96.6	413
D.O. (mg/L)	10%	24.96	33.14	34.56	33.0	31.50	33.48	33.57	33.64	35.69
Temperature (°C) (°F)	3%	14.78	14.60	14.81	14.95	14.00	14.40	14.33	14.39	14.32
ORP[3](mV)	+/-10 mv	-47	-53	-47	-46	-46	-45	-42	-38	-47
Appearance		C	ST	ST	C	C	ST	ST	ST	ST
Free Product (Yes/No)		N	N	N	N	N	N	N	N	N
Odor		N	N	N	N	N	N	N	N	N
Comments		6.7'	7.2'	7.5'	7.5'	7.7'	7.7'	7.7'	7.7'	7.7'
			1.5gal	2gal	3gal	4gal	5gal	6gal	7gal	10gal

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

Headspace - 20 ppm

Sampled at 11:10

All parameters stabilized except for turbidity. Treatment solutions still in saturated zone, maybe causing high turbidity readings.

C&S Engineers, Inc.
141 Elm Street Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
www.cscos.com

Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		2/5/17							
Well Number		~~BG~~ MW-3							
Diameter (inches)		8							
Total Sounded Depth (feet)		14.8							
Static Water Level (feet)		6.95							
H_2O Column (feet)		7.85							
Pump Intake (feet)		8							
Well Volume (gallons)		20.41							
Amount to Evacuate (gallons)									
Amount Evacuated (gallons)									

FIELD READINGS

Date	Stabilization Criteria								
Time		11:34	11:40	11:44	11:49	11:59			
pH (Std. Units)	+/-0.1	10.86	11.04	11.03	11.03 ✓	11.02			
Conductivity (mS/cm)	3%	79.	81.9	82.4	82.4 ✓	82.2			
Turbidity (NTU)	10%	0.3	0.6	1.1	2.5 ✓	0.1			
D.O. (mg/L)	10%	16.26	9.61	8.01	8.13 ✓	9.92			
Temperature (°C) (°F)	3%	14.56	14.36	14.43	14.42 ✓	14.65			
ORP[3](mV)	+/-10 mv	-1	-11	-11	-11 ✓	-10			
Appearance		C	C	C	C	C			
Free Product (Yes/No)		N	N	N	N	N			
Odor		N	N	N	N	N			
Comments		6.95'	7.3' 1gal	7.45' 1.5gal	7.55' 2gal	7.65' 3gal			

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

Headspace - 8ppm

Sampled at 12:00

C&S Engineers, Inc.
141 Elm Street Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
www.cscos.com

Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		7/5/17						
Well Number		BCP-MW-4						
Diameter (inches)		2						
Total Sounded Depth (feet)		14.5						
Static Water Level (feet)		6.84						
H_2O Column (feet)		7.66						
Pump Intake (feet)		8						
Well Volume (gallons)		1.3022						
Amount to Evacuate (gallons)		3.9066						
Amount Evacuated (gallons)								

FIELD READINGS

Date	Stabilization Criteria								
Time		12:38	12:45	12:49	12:56				
pH (Std. Units)	+/-0.1	10.15	9.94	9.91	9.43				
Conductivity (mS/cm)	3%	13.7	9.99	9.6	8.35				
Turbidity (NTU)	10%	935	—	—	—				
D.O. (mg/L)	10%	20.45	17.91	17.01	17.02				
Temperature (°C) (°F)	3%	16.43	16.37	16.21	17.04				
ORP[3](mV)	+/-10 mv	71	44	46	86				
Appearance		T	ST	ST	ST				
Free Product (Yes/No)		N	N	N	N				
Odor		N	N	N	N				
Comments		6.84'	7' 0.5gal	7' 1gal	7' 2gal				

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

Headspace - 0 ppm
Sampled at 13:00
All parameters stabilized except for turbidity.
Treatment solutions still in saturated zone may have caused high turbidity.

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Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		2/5/17							
Well Number		BG-MW-5							
Diameter (inches)		2							
Total Sounded Depth (feet)		15.3							
Static Water Level (feet)		7.8							
H_2O Column (feet)		7.5							
Pump Intake (feet)		8							
Well Volume (gallons)		1.275							
Amount to Evacuate (gallons)		3.825							
Amount Evacuated (gallons)									

FIELD READINGS

	Stabilization Criteria								
Date									
Time		13:59	14:06	14:10	14:14				
pH (Std. Units)	+/-0.1	8.10	8.04	7.90	7.78				
Conductivity (mS/cm)	3%	5.93	6.13	6.15	6.14				
Turbidity (NTU)	10%	72.9	52.1	32.3	21.3				
D.O. (mg/L)	10%	0.85	0.53	0.62	0.7				
Temperature (°C) (°F)	3%	15.69	15.45	15.47	15.43				
ORP[3](mV)	+/-10 mv	-213	-215	-216	-209				
Appearance		C	C	C	C				
Free Product (Yes/No)		N	N	N	N				
Odor		N	N	N	N				
Comments		7.8'	8.2'	8.2'	8.2'				
			0.5gal	0.75gal	1gal				

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

Headspace - 14ppm

Sampled at 14:15

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Buffalo, New York 14203
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www.cscos.com

Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: AS

WELL DATA

Date		11/17							
Well Number		BCP-MW-4							
Diameter (inches)		2							
Total Sounded Depth (feet)		15.18							
Static Water Level (feet)		6.79							
H_2O Column (feet)		8.39							
Pump Intake (feet)		no pump; used bailer							
Well Volume (gallons)		1.4263 x3							
Amount to Evacuate (gallons)		4.2789							
Amount Evacuated (gallons)									

headspace pid: 2.6 ppm

FIELD READINGS

Date	Stabilization Criteria	11/17							
Time		10:46 am							
pH (Std. Units)	+/-0.1								
Conductivity (mS/cm)	3%								
Turbidity (NTU)	10%								
D.O. (mg/L)	10%								
Temperature (°C) (°F)	3%								
ORP[3](mV)	+/-10 mv								
Appearance		VT							
Free Product (Yes/No)		No							
Odor		No odor (earthy smell)							
Comments		2 gal + 2 gal = 4 gal total and then sampled (@11:50 am) (3 VOC vials)							

C = Clear T = Turbid ST = Semi-Turbid VT = Very Turbid

Well volume: $\pi r^2 h$

$\pi\left(\frac{1}{12}\right)^2(8.39\ ft) = 0.183\ ft^3\ (3\ \text{well vol.}) = 0.5491\ ft^3\left(\frac{7.481\ gal}{1\ ft^3}\right) = 4.1079\ gal$

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Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		11/2							
Well Number		BCP-MW-6							
Diameter (inches)		8							
Total Sounded Depth (feet)		10.32							
Static Water Level (feet)		6.42							
H_2O Column (feet)		3.9							
Pump Intake (feet)		8							
Well Volume (gallons)		10.14							
Amount to Evacuate (gallons)		30.42							
Amount Evacuated (gallons)									

FIELD READINGS

Date	Stabilization Criteria	11/2								
Time		10:14	10:16	10:20	10:22	10:24	10:27	10:29	10:36	10:40
pH (Std. Units)	+/-0.1	11.24	11.24	11.25	11.20	11.18	11.13	11.22	11.18	10.96
Conductivity (mS/cm)	3%	54.2	53.16	26.6	49.9	46.9	42.7	51.5	46.3	29.7
Turbidity (NTU)	10%	304	191	72.9	125	112	114	513	716	685
D.O. (mg/L)	10%	37.91	15.93	11.70	33.59	31.51	28.89	22.84	30.83	25.79
Temperature (°C)/(°F)	3%	10.07	16.90	17.00	16.81	16.86	16.86	16.73	16.59	16.66
ORP[3](mV)	+/-10 mv	-16	-18	-17	-17	-15	-11	-20	-18	9
Appearance		C	ST	ST	ST	ST	ST	T	VT	VT
Free Product (Yes/No)		N	N	N	N	N	N	N	N	N
Odor		N	N	N	N	N	N	N	N	N
Comments			6.5 gt	2 gal	2.5 gal	4.0 gal	5.0 gal	6.0 gal	8.0 gal	10.0 gal
			(moved pump intake)							

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

headspace (@ end) 1.0 ppm

Sampled @ 10:50 am
Still turbid

Time	10:45	10:48	10:50
PH	10.74	10.51	10.53
Conductivity	19.7	14.2	14.6
Turbidity	0.00	0.00	0.00
D.O.	23.35	19.72	19.50
Temp	16.61	16.61	16.65
ORP[3]	37	62	67
Appearance	VT	VT	T
Free Product	N	N	N
Odor	N	N	N
	12.0 gal	13.5 gal	post sampling

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www.cscos.com

Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		11/2							
Well Number	BCP	MW-1							
Diameter (inches)		2							
Total Sounded Depth (feet)		15.5							
Static Water Level (feet)		6.32							
H_2O Column (feet)		9.18							
Pump Intake (feet)		7							
Well Volume (gallons)		1.56							
Amount to Evacuate (gallons)		4.682							
Amount Evacuated (gallons)									

FIELD READINGS

Date	Stabilization Criteria	11/2							
Time		11:25	11:25	11:27	11:28	11:29	11:30	11:30	11:36
pH (Std. Units)	+/-0.1	7.14	7.20	7.23	7.24	7.24	7.25	7.25	7.25
Conductivity (mS/cm)	3%	0.286	0.381	0.346	0.424	0.383	0.369	0.437	0.360
Turbidity (NTU)	10%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D.O. (mg/L)	10%	8.69	8.35	7.69	6.97	6.71	6.31	6.07	4.62
Temperature (°C) (°F)	3%	15.69	15.46	15.28	15.24	15.24	15.23	15.23	15.23
ORP[3](mV)	+/-10 mv	-110	-87	-93	-94	-94	-94	-93	-93
Appearance		C	C	C	C	C	C	C	C
Free Product (Yes/No)		N	N	N	N	N	N	N	N
Odor		N	N	N	N	N	N	N	N
Comments			1.0 gal	2.0 gal	2.5 gal	3.0 gal	3.5 gal	4.0 gal	post sampling (after 4 gal)

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

headspace 0.3 ppm
sampled @ 11:35 am

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Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		11/2							
Well Number		BCP-MW-7							
Diameter (inches)		2							
Total Sounded Depth (feet)		15.1							
Static Water Level (feet)		8.94							
H_2O Column (feet)		6.16							
Pump Intake (feet)		12							
Well Volume (gallons)		1.0472							
Amount to Evacuate (gallons)		3.1416							
Amount Evacuated (gallons)									

FIELD READINGS

Date / Time	Stabilization Criteria								
		12:18	12:19	12:19	12:20	12:21	12:22	12:24	12:26
pH (Std. Units)	+/-0.1	7.22	7.10	7.07	7.05	7.02	7.01	6.99	7.01
Conductivity (mS/cm)	3%	4.16	4.18	4.24	4.32	4.42	4.42	4.49	4.63
Turbidity (NTU)	10%	25.3	46.5	88.7	107	125	83.1	37.3	101.6
D.O. (mg/L)	10%	1.14	0.42	0.51	0.60	0.75	0.35	0.00	0.00
Temperature (°C) (°F)	3%	16.22	16.35	16.41	16.44	16.40	16.32	16.22	16.14
ORP[3](mV)	+/-10 mv	110	110	108	107	105	104	102	97
Appearance		C	C	C	ST	ST	ST	ST/C	ST/C
Free Product (Yes/No)		N	N	N	N	N	N	N	N
Odor		N	N	N	N	N	N	N	N
Comments			0.5 gal	0.75 gal	1.0 gal	1.5 gal	2.0 gal	2.5 gal	post sampling

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

headspace 0.2 ppm
sampled @ 12:25 pm

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Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		11/2							
Well Number		BLP-NM-4							
Diameter (inches)		2							
Total Sounded Depth (feet)		4.77							
Static Water Level (feet)		-dry-							
H_2O Column (feet)									
Pump Intake (feet)									
Well Volume (gallons)									
Amount to Evacuate (gallons)									
Amount Evacuated (gallons)									

* clogged: must be treatment solution b/c greyish muck on end of water level

FIELD READINGS

Date	Stabilization Criteria								
Time									
pH (Std. Units)	+/-0.1								
Conductivity (mS/cm)	3%								
Turbidity (NTU)	10%								
D.O. (mg/L)	10%								
Temperature (°C) (°F)	3%								
ORP[3](mV)	+/-10 mv								
Appearance									
Free Product (Yes/No)									
Odor									
Comments									

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

Opened cap to well - headspace 1.1 ppm
Not sampled

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Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		11/2							
Well Number		BCP-MW-3							
Diameter (inches)		8							
Total Sounded Depth (feet)		14.84							
Static Water Level (feet)		6.41							
H_2O Column (feet)		8.43							
Pump Intake (feet)		8							
Well Volume (gallons)		21.918							
Amount to Evacuate (gallons)		65.754							
Amount Evacuated (gallons)									

FIELD READINGS

Date / Time	Stabilization Criteria									
		1:30	1:32	1:33	1:34	1:36	1:38	1:45	1:50	1:54
pH (Std. Units)	+/-0.1	10.04	10.26	10.25	10.23	10.21	10.18	10.32	10.19	10.48
Conductivity (mS/cm)	3%	21.0	20.3	19.7	19.3	17.8	15.8	18.4	15.1	0.516
Turbidity (NTU)	10%	0.00	16.4	17.3	21.4	22.8	20.7	20.9	39.4	41.3
D.O. (mg/L)	10%	10.21	10.55	9.87	9.37	8.02	6.64	8.33	7.05	8.19
Temperature (°C) (°F)	3%	16.63	17.15	17.20	17.24	17.25	17.25	17.11	17.09	16.99
ORP[3](mV)	+/-10 mv	-191	24	16	11	-3	-11	-55	-103	-93
Appearance		C	C	C	C	C	C	C	ST/C	ST/C
Free Product (Yes/No)		N	N	N	N	N	N	N	N	N
Odor		N	N	N	N	N	N	N	N	N
Comments			1.0 gal	1.5 gal	2.0 gal	3.0 gal	3.5 gal	5.5 gal (pump intake @9 ft)	7.0 gal	post sampling

Yellowish turbid

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

opened well cap - headspace 11 ppm
sampled @ 1:50 pm

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Well Sampling Field Data Sheet

Well Casing Unit Volume (gal/l.f.)		
1¼" = 0.08	2" = 0.17	3" = 0.38
4" = 0.66	6" = 1.5	8" = 2.6

Client Name: Ciminelli Real Estate
Site Name: Conventus
Project No.: N46.001.001
Field Staff: CM

WELL DATA

Date		11/2							
Well Number		BCP-MW-5							
Diameter (inches)		2							
Total Sounded Depth (feet)		15.34							
Static Water Level (feet)		6.07							
H_2O Column (feet)		9.27							
Pump Intake (feet)		8							
Well Volume (gallons)		1.5759							
Amount to Evacuate (gallons)		4.7277							
Amount Evacuated (gallons)									

FIELD READINGS

Date	Stabilization Criteria	11/2							
Time		2:32	2:37	2:42	2:42	2:44	2:47		
pH (Std. Units)	+/-0.1	9.00	8.82		8.85	8.92	9.08		
Conductivity (mS/cm)	3%	7.19	6.80		6.51	6.39	6.50		
Turbidity (NTU)	10%	---	---		---	---	---		
D.O. (mg/L)	10%	1.48	0.00		0.52	0.00	0.00		
Temperature (°C) (°F)	3%	17.09	17.32		17.40	17.36	17.25		
ORP[3](mV)	+/-10 mv	-19	-160		-165	-209	-230		
Appearance		C/ST	C		C	C	C		
Free Product (Yes/No)		N	N		N	N	N		
Odor		N	N		N	N	N		
Comments			0.5 gal	0.75 gal (pump intake @ 9 ft)	1.0 gal	1.25 gal (pump intake @ 9.5 ft)	post sampling		

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

well cap opened - headspace 12.9 ppm
sampled @ 2:45 pm
realized interval measuring was not started - that's why some values are incorrect - started around time of sampling