COKE OVEN INTERIM MEASURES PROGRESS REPORT

TRADEPOINT ATLANTIC
SPARROWS POINT, MARYLAND

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1.0 EXECUTIVE SUMMARY

1.1. CELL 1

The AS/SVE system in the Former Benzol Processing Area (Cell 1) operated from April 5, 2017 through the end of the year, removing an estimated 311 pounds of hydrocarbons. From January 1, 2017 to April 5, 2017 the system was inactive due to maintenance activity; the system was turned off throughout January so that carbon filters could be installed, and the system remained off in February and March because the system trailer was shipped to Massachusetts for overhaul. On April 1, 2017 the unit was received and finally began operation on April 5, 2017. Removal efficiencies and amounts were the highest in the period immediately following restart of the system, and the concentrations of total VOCs in groundwater at the two monitoring wells that are located within or downgradient of the Cell 1 boundary reflect downward concentration trends since the restart of system operation on April 5, 2017.

1.2. CELL 2

Cell 2 includes an AS/SVE system for the shallow zone groundwater and a GWPT system for the intermediate zone groundwater in the Former Coal Basin Area of the site. These systems operated for the majority of the year, resulting in the total removal of approximately 6,800 pounds of hydrocarbons from the Cell 2 area; less than 0.03% of the total amount removed was through the AS/SVE system, with the rest removed through the GWPT system. Since 2014, total VOC concentrations in shallow zone groundwater have generally remained the same or decreased slightly, while total VOC concentrations in intermediate zone groundwater have decreased by more than 50% for the two wells with the highest total VOC concentrations, and remained generally stable at the other wells. Based on the relatively low removal effectiveness of the AS/SVE system at Cell 2, this system should be considered for shut-down and potential relocation to Cell 3.

1.3. CELL 3

The AS/SVE system in the “Cove” Area (Cell 3) operated for approximately 6,500 hours in 2017, removing an estimated 79 pounds of hydrocarbons. Overall removal rates were similar to previous time periods. The concentrations of volatile hydrocarbons in the groundwater have generally decreased slightly over the past year or two, but there is no apparent overall trend, and current concentrations at the monitoring wells are generally similar to or slightly lower than the concentrations when the remedial AS/SVE system was started in June 2011. Enhancements to the Cell 3 IMs will be considered in 2018, possibly involving expansion of the AS/SVE system with additional AS and SVE wells.

1.4. CELL 5

Cell 5 includes a dual-phase extraction (DPE) system and a Dense Non-Aqueous Phase Liquid (DNAPL) recovery system for the shallow zone groundwater in the "Turning Basin" side of the former Coke Oven Area. These systems were operated for the majority of the year, resulting in the total removal of approximately 2,260 pounds of hydrocarbons from the Cell 5 area. Although the current IMs appear to be effectively removing hydrocarbons from the Cell 5 area, system enhancements will be evaluated in 2018 in an attempt to better reduce hydrocarbon (primarily naphthalene) concentrations in groundwater.

1.5. CELL 6

Cell 6 consists of an LNAPL Multi-Phase Extraction (MPE) monitoring and recovery system at the Former Benzol Processing Area, along with some manual bailing and skimming. The extraction system and manual skimming and bailing removed an estimated 12,059 pounds of LNAPL during 2017, with a cumulative removal amount of approximately 135,880 pounds since LNAPL recovery was started in Cell 6 in July 2010 (the MPE system starting operating in October 2016).

2.0 INTRODUCTION

This Coke Oven Interim Measures Progress Report for groundwater remediation at the Tradepoint Atlantic property has been prepared by ARM Group (ARM) on behalf of EnviroAnalytics Group (EAG). This report presents operational information and monitoring data collected over the full year of 2017 for interim measures (IMs) that have been installed to address identified environmental conditions at the former Coke Oven (CO) Special Study Area. This report summarizes IM performance and is submitted in accordance with reporting requirements outlined in correspondence received from USEPA on March 26, 2013, November 14 and 16, 2017, and subsequent communications.

2.1. TRADEPOINT ATLANTIC SITE BACKGROUND

The Tradepoint Atlantic property is located in Baltimore County, Maryland at the southeastern corner of the Baltimore metropolitan area, approximately nine miles from the downtown area. The property encompasses approximately 3,100 acres located on a peninsula situated on the Patapsco River near its confluence with the Chesapeake Bay, physically positioned in the mouth of the heavily industrialized and urbanized Baltimore Harbor / Patapsco River region. A land connection to the northeast links the peninsula with the adjacent community of Edgemere.

From the late 1800s until 2012, the property was used for the production and manufacturing of steel. Iron and steel production operations and processes at the Site included raw material handling, coke production, sinter production, iron production, steel production, and semi-finished and finished product preparation. In 1970, Sparrows Point was the largest steel facility in the United States, producing hot and cold rolled sheets, coated materials, pipes, plates, and rod and wire. The steelmaking operations at the facility ceased in fall 2012, and current plans for the Site include demolition and redevelopment over the next several years. Some portions of the site have already undergone remediation and/or redevelopment.

2.2. COKE OVEN

The IMs currently in operation at the CO are located within five distinct smaller areas, designated as Cells 1-3, 5, and 6. Below is a list of the cells, the name of the area they cover, and their current IM system(s):

- Cell 1 (former Benzol Processing Area): Air Sparge/Soil Vapor Extraction (AS/SVE) system;
- Cell 2 (former Coal Basin Area): AS/SVE system in the shallow groundwater zone and groundwater pump and treat (GW P&T) system in the intermediate zone;
- Cell 3 (Cove Area): AS/SVE system;

- Cell 5 (Turning Basin side of former Coke Oven Area): Dual Phase Extraction (DPE) system for the shallow zone;
- Cell 5: Dense Non-Aqueous Phase Liquid (DNAPL) Recovery system; and
- Cell 6 (former Benzol Processing Area): Multi-Phase Extraction (MPE) of Light Non-Aqueous Phase Liquid (LNAPL).

This progress report provides the following for each cell: a brief description of the IM system(s); notable operations activities that occurred during 2017; a discussion of operational and analytical data from 2017, an evaluation of the effectiveness of the IM system(s), and recommendations for continuation or modification of the current IM systems.

3.0 CELL 1

3.1. CELL DESCRIPTION

Cell 1 consists of an AS/SVE system that is coupled with a vapor-phase granular activated carbon (VGAC) off-gas treatment unit. The purpose of the AS/SVE system is to remove volatile hydrocarbons from the subsurface, while the purpose of the VGAC off-gas treatment unit is to capture organic compounds that are present within the extracted vapors. **Figure C1-1** shows the system layout of Cell 1 and the locations of the major design components, including the air sparging wells, vapor collection trenches and groundwater monitoring wells.

3.2. OPERATIONS

Operational performance of the AS/SVE system during this reporting period is summarized in **Table C1-1**. The system did not operate during the first quarter of the year (January 1st to April 5th) as carbon filters were being installed to convert the system from an electric catalytic oxidation (CATOX) unit to a VGAC off-gas treatment unit, and the system trailer was also shipped out of state for overhaul. Installation, troubleshooting, factory inspection, system overhaul, and electrical connection all contributed to this systems downtime in the first quarter of 2017. For the remainder of the year, the AS/SVE system operated for a total of 4,770 hours. The average hydrocarbon removal rate from April to December was approximately 0.061 pounds per operating hour. **Table C1-1** also includes a cumulative summary of operational performance since system startup in August 3, 2010. In total, the AS/SVE system at Cell 1 has removed approximately 12,893 pounds of hydrocarbons as shown graphically in **Figure C1-2**.

Due to the system not operating in the first quarter, SVE influent air samples were only collected from the last three quarters to monitor the extraction system performance. Groundwater samples were collected from three wells each quarter to monitor volatile organic compound (VOC) contamination in the subsurface. Groundwater samples were collected from the following wells each quarter:

- CO93-PZM (former BP-MW-09 , upgradient of Cell 1),
- CO18-PZM006 (upgradient of Cell 1 at edge of berm), and
- CO02-PZM006 (downgradient of Cell 1).

The soil-gas and groundwater samples were submitted to Pace Analytical Services, Inc. for analysis.

3.3. MONITORING RESULTS

Analytical results for the SVE influent air samples collected in 2017 are shown in **Table C1-2.** Analytical results for groundwater samples collected in 2017 are shown in **Table C1-3.** A time-series graph of total VOCs measured in groundwater samples is included as **Figure C1-3.**

3.4. EVALUATION OF EFFECTIVENESS

Based on the system monitoring data from 2017, and as shown on **Figure C1-2**, the AS/SVE system is continuing to remove volatile hydrocarbons from the subsurface in the Cell 1 area. The operations data indicates that approximately 311 pounds of hydrocarbons were removed in 2017 between April 5 and December 31. As shown on **Table C1-1**, removal efficiencies were highest in the period immediately following restart of the system, with removal efficiencies and soil-gas concentrations (see **Table C1-2**) decreasing over the rest of the year. The total amount of hydrocarbons removed in the second quarter of 2017 (i.e., the first quarter following restart of the system) was approximately 266 pounds, which is more than 85% of the total amount removed during the year, and more than the previous 2.5 years combined. Based on **Figure C1-3,** the concentrations of total VOCs in groundwater at the two monitoring wells that are located within or downgradient of the Cell 1 boundary (CO02 and C018) reflect downward concentration trends since the start of system operation (based on linear best-fit trend lines).

3.5. SUMMARY AND RECOMMENDATIONS

The AS/SVE system in the Former Benzol Processing Area (Cell 1) operated from April 5, 2017 through the end of the year, removing an estimated 311 pounds of hydrocarbons. Removal efficiencies and amounts were the highest in the period immediately following restart of the inactive system, and the concentrations of total VOCs in groundwater at the two monitoring wells that are located within or downgradient of the Cell 1 boundary generally reflect downward concentration trends since the start of system operation. Based on this information, the existing system should continue to be operated and monitored in accordance with current practices, although consideration will be given to operating the system on an intermittent basis (i.e., periodic shut downs of optimal length to be determined) during parts of 2018 in an attempt to maximize hydrocarbon removal amounts and efficiencies. The groundwater data should also be evaluated to correlate the measured concentration trends with weather conditions, system operational parameters, groundwater elevations, and other potentially relevant factors. Depending on projected long-term groundwater quality improvements, additional measures may be considered and recommended to support the removal of hydrocarbons from the Cell 1 area.

4.0 CELL 2

4.1. DESCRIPTION

Cell 2 consists of an AS/SVE system coupled with a VGAC off gas treatment unit for groundwater treatment in the shallow zone, and a groundwater pump and treat (GWPT) system for recovery of groundwater in the intermediate zone. The system design plans were approved by USEPA in correspondence received on September 10, 2013, and the system began full-scale operation in October 2014. The system was updated on February 13, 2017 from a CATOX unit to the current VGAC off-gas treatment unit. **Figure C2-1** shows the system layout of Cell 2 and locations of the major design components including the air sparging wells, vapor collection trenches, intermediate groundwater recovery wells, groundwater injection wells and groundwater monitoring well locations.

4.1.1. AS/SVE System

The delivery and recovery systems for the shallow AS/SVE system include the use of air sparge points and a horizontal vapor extraction trench. Eight (8) air sparge points were installed along a 500-foot long stretch near the shoreline of Cell 2. Additional details of the air sparge zone and recovery trench are listed below.

Air Sparge Zone:

- Eight 2-inch diameter AS points, spaced approximately 56 feet apart
- Each AS point installed to 15-17 feet below ground surface (bgs), which is approximately the bottom of the slag fill
- Bottom 2 feet of each point is a 20-slot screen

Recovery Trench:

- 500-foot section of horizontal, 4-inch diameter perforated pipe (20-slot screen) installed to a total depth of 5 feet
- 5 vertical 4-inch risers spaced every 100 feet
- Top 2 feet is a clay cap
- Geotextile fabric 2 feet bgs (under clay)
- Granular screened slag backfill from 2-5 feet bgs
- Horizontal recovery piping located approximately 3 feet bgs (above water table)

4.1.2. GWPT System

The GWPT system includes a low profile air stripper that utilizes an oxidizer to destroy VOC vapors generated prior to exhausting to the atmosphere. The design groundwater flow rate is for a maximum of 40 gallons per minute (gpm). The oxidizer is sized to handle up to a 600 cubic feet per minute (CFM) air flow rate. The recovery and re-injection systems include the use of six groundwater recovery wells and six groundwater injection wells. The six recovery wells (RWs)

are installed along a 500-foot-long stretch near the shore line of Cell 2. Additional details of the GWPT system are listed below.

Components (recovery wells):

- Six 4-inch diameter wells spaced approximately 83 feet apart
- Installed to 50 feet bgs (intermediate zone)
- Bottom 15 feet of each RW screened with 20-slot screen
- Electric pump in each RW, approximately 8-10 feet above the bottom of the well

Treatment Process:

- Recovered groundwater enters low profile air stripper
- Off-gas sent to CATOX unit for destruction
- Treated groundwater pumped to six 6-inch diameter re-injection wells screened from 5 to 15 feet bgs (shallow zone)

Specific well construction details for each well are shown on **Table C2-2.**

4.2. OPERATIONS

4.2.1. AS/SVE System

Operational performance of the AS/SVE System at Cell 2 during this reporting period is summarized in **Table C2-1**. In summary, the AS/SVE system operated for 7,103 hours during 2017, with a minimal amount of that time operating using the CATOX unit before being switched to the VGAC system in early February. The average hydrocarbon removal rate over 2017 was 0.00028 pounds per operating hour, with a total of approximately 1.7 pounds removed. **Table C2-1** also includes a cumulative summary of operational performance since system startup in October 1, 2014. In total, the AS/SVE system at Cell 2 has removed approximately 282 pounds of recovered hydrocarbons.

SVE influent air samples were collected for part of the first quarter before the CATOX unit was replaced by the VGAC off-gas treatment unit. SVE influent air samples were then collected for each of the remaining quarters to continue to monitor the system's performance, and were submitted to Pace Analytical Services, Inc. for analysis.

4.2.2. GWPT System

Groundwater samples were also collected each quarter to monitor VOC contamination in the subsurface. Groundwater samples were collected from the following wells each quarter:

<u>Shallow Zone</u>

- CO27-PZM012
- CO36-PZM008
- CO39-PZM007
- CO40-PZM008

- CO41-PZM 001
- CO42-PZM004
- CO38-PZM006

Intermediate Zone

- CO27-PZM046
- CO36-PZM043
- CO37-PZM038
- CO38-PZM043
- CO39-PZM042
- CO41-PZM036

Groundwater samples were submitted to Pace Analytical Services, Inc. for analysis.

Depth-to-water level measurements were also recorded for each of the groundwater wells in order to calculate static groundwater elevations. The resulting groundwater elevations were used to create groundwater contour maps for both the shallow zone and the intermediate zone. The depth-to-water level measurements and groundwater elevations are summarized in **Table C2-3.** Groundwater elevation contour maps for each quarter are included as **Figures C2-3 to C2-10.**

The GWPT system extracted and treated a total of 4,013,441 gallons of water from the Cell 2 Area pumping wells during 2017. Over the course of the year, the average pumping rate for the pump and treat system was 10,996 gallons per day (gpd), or 7.6 gallons per minute (gpm). Quarterly totals of total gallons of water discharged through the GWPT system are shown on **Table C2-4**, along with the average hydrocarbon concentrations and removal amounts for each quarter and the entire year.

4.3. MONITORING RESULTS

Analytical results for CATOX/VGAC Influent (soil-gas) samples collected in 2017 are shown in **Table C2-5.** Analytical results for groundwater samples collected in 2017 are shown in **Table C2-6.** Concentrations of benzene detected in groundwater samples collected from the intermediate zone for each quarter are displayed on **Figures C2-11 through C2-14.** Time-series graphs of total VOCs collected in groundwater samples are included as **Figures C2-15** and **C2-16.**

The cumulative hydrocarbon removal amounts from the AS/SVE at Cell 2 are summarized on **Table C2-1**. The quarterly hydrocarbon removal amounts for the GWPT system at Cell 2 during 2017 are summarized on **Table C2-4**, and shown graphically on **Figure C2-2**, along with the previous removal amounts.

Based on the estimated groundwater elevation contours shown on **Figures C2-3 to C2-10**, the interpreted flow of groundwater in the shallow zone groundwater is generally towards the west at

a relatively low hydraulic gradient, and the flow of groundwater in the intermediate zone is towards the groundwater extraction wells in the north-central edge of the Cell 2 area.

4.4. Evaluation of Effectiveness

Based on the system monitoring data from 2017, and as shown on **Figure C2-2**, the AS/SVE and GWPT systems are continuing to remove volatile hydrocarbons from the subsurface in the Cell 2 area. As shown on **Table C2-4** and **Figure C2-2**, approximately 6,800 pounds of hydrocarbons were removed from the Cell 2 area in 2017. Of the total amount removed, less than 0.03% of the amount (i.e., approximately 1.7 pounds) was removed through the AS/SVE system, with the rest removed through the GWPT system. The total amount removed in 2017 was much greater than the amount removed in 2016 (approximately 2,000 pounds), largely resulting from the greater total volume of water pumped in 2017. Based on **Figure C2-15**, the total VOC concentrations in the shallow zone groundwater generally show an overall decreasing or stable trend since the first sampling event in 2014. Based on **Figure C2-16**, the total VOC concentrations at the two intermediate zone groundwater wells with the highest concentrations (i.e., CO27 and CO41) have decreased to less than 50% of the concentrations measured at the first sampling event in 2014, with a continuously declining trend from 2015 through the end of 2017. The total VOC concentrations at the other intermediate zone groundwater monitoring wells at Cell 2 have been relatively stable since the first sampling event in 2014.

4.5. Summary and Recommendations

Cell 2 includes an AS/SVE system for the shallow zone groundwater and a GWPT system for the intermediate zone groundwater in the Former Coal Basin Area of the site. These systems operated for the majority of the year, resulting in the total removal of approximately 6,800 pounds of hydrocarbons from the Cell 2 area; less than 0.03% of the total amount removed was through the AS/SVE system, with the rest removed through the GWPT system. Since 2014, total VOC concentrations in shallow zone groundwater have generally remained the same or decreased slightly, while total VOC concentrations in intermediate zone groundwater have decreased by more than 50% for the two wells with the highest total VOC concentrations, and remained generally stable at the other wells.

Based on this information, the existing GWPT system appears to be effectively removing hydrocarbons from the subsurface and should continue to be operated and monitored in accordance with current practices. However, the AS/SVE system is not providing effective removal (i.e., less than 2 pounds of hydrocarbons removed in 2017) and should be shut down and relocated to the Cell 3 area in an attempt to enhance contaminant mass removal from Cell 3.

5.0 CELL 3

5.1. DESCRIPTION

Cell 3 consists of an AS/SVE system that is coupled with a VGAC off-gas treatment unit. The purpose of the AS/SVE system is removing volatile hydrocarbons from the subsurface, while the purpose of the VGAC off-gas treatment unit is to capture organic compounds from the extracted vapors. **Figure C3-1** shows the system layout of Cell 3 and locations of the major design components, including the air sparging wells, vapor collection trenches and groundwater monitoring wells. The major design components are described in the Cell 3 final design report (*Coke Oven Area Interim Measures Cell 3 "Cove" Area Air Sparge/Soil Vapor Extraction System Design*), submitted to USEPA on March 1, 2011.

5.2. OPERATIONS

Operational performance of the AS/SVE system in Cell 3 during this reporting period is summarized in **Table C3-1**. In summary, the AS/SVE system operated for a total of 6,504 hours during 2017. The average hydrocarbon removal rate was approximately 0.012 pounds per operating hour in 2017, resulting in a total of approximately 79 pounds removed. **Table C3-1** also includes a cumulative summary of operational performance since system startup on June 24, 2011. In total, the AS/SVE system in Cell 3 has removed approximately 1,784 pounds of hydrocarbons as shown graphically in **Figure C3-2**.

SVE influent air samples were collected each quarter to monitor the AS/SVE system performance. Groundwater samples were also collected each quarter to monitor VOC contamination in the subsurface. Groundwater samples were collected each quarter from the following wells:

- CO101-PZM (downgradient of Cell 3);
- CO102-PZM (upgradient of Cell 3);
- CO103-PZM (upgradient of Cell 3);
- CO104-PZM (downgradient of cell 3); and
- CO30-PZM015 (downgradient of Cell 3).

5.3. MONITORING RESULTS

Analytical results for the SVE influent air samples collected in 2017 are shown in **Table C3-2.** Analytical results for groundwater samples collected in 2017 are shown in **Table C3-3.** A time-series graph of total VOCs collected in groundwater samples is included as **Figure C3-3.**

5.4. EVALUATION OF EFFECTIVENESS

Based on the system monitoring data from 2017, and as shown on **Figure C3-2**, the AS/SVE system is continuing to remove volatile hydrocarbons from the subsurface in the Cell 3 area. As shown on **Table C3-1** and **Figure C3-2**, approximately 79 pounds of hydrocarbons were removed from the Cell 3 area in 2017, and at a rate similar to previous time periods. The groundwater monitoring data indicate that benzene is the most prevalent VOC constituent in groundwater at Cell 3. Since system startup on June 24, 2011, a generally inconclusive VOC concentration trend is documented, as illustrated in **Figure C3-3**; however, all 5 of the Cell 3 monitoring wells have shown a generally stable or gradual decreasing trend of VOC concentrations since mid-2016.

5.5. SUMMARY AND RECOMMENDATIONS

The AS/SVE system in the "Cove" Area (Cell 3) operated for approximately 6,500 hours in 2017, removing an estimated 79 pounds of hydrocarbons. Overall removal rates were similar to previous time periods. The concentrations of volatile hydrocarbons in the groundwater have generally decreased slightly over the past year or two, but there is no apparent overall trend, and current concentrations at the monitoring wells are generally similar to or slightly lower than the concentrations when the remedial AS/SVE system was started in June 2011. Based on this information, the existing system should continue to be operated and monitored in accordance with current practices, although consideration should be given to modifying the system operating parameters to maximize hydrocarbon removal amounts and efficiencies. In particular, the installation of additional AS/SVE points will be considered, potentially making use of the extraction and off-gas treatment system from Cell 2.

6.0 CELL 5

6.1. DESCRIPTION

6.1.1. DPE System

Cell 5 consists of a dual-phase extraction (DPE) system with a low-profile air stripper followed by vapor-phase granular activated carbon (VGAC) for removal and treatment of vapor and dissolved volatile hydrocarbons in the shallow groundwater zone. The system design plans were approved by US EPA in correspondence received on September 10, 2013, and the system began full-scale operation in October 2014. **Figure C5-1** shows the system layout of Cell 5 and locations of the major design components including the dual-phase recovery points, treatment system, groundwater injection wells and groundwater monitoring well locations.

The recovery and re-injection systems include the use of dual-phase (soil vapor and groundwater) recovery wells and six groundwater re-injection wells. Twelve (12) recovery wells were installed along an approximately 500-foot-long stretch between the naphthalene source area and the eastern shoreline along the Turning Basin. Additional details of the DPE system are listed below.

Components (recovery wells):

- Twelve 1.5-inch diameter RWs spaced approximately 42 feet apart
- Installed to 15-17 feet bgs (to bottom of shallow slag)
- Bottom 2 feet of each RW screened with 20-slot screen
- Vapor recovery perforations located between 10-12 ft bgs

Treatment Process:

- Recovered groundwater enters MS knockout tank to separate air and water phases
- Water sent to low profile air stripper
- Off-gas sent to VGAC for capture
- Treated groundwater pumped to six 6-inch diameter re-injection wells screened from 5 to 15 feet (shallow zone)

Specific well construction details for each well are shown on **Table C5-1.**

6.1.2. DNAPL Recovery System

DNAPL product removal began to be extracted from the Cell 5 area in the latter part of the 4th quarter 2015. DNAPL was extracted from several newly constructed extraction wells that have DNAPL sumps below the screened interval. Compressed air DNAPL skimmer pumps were installed within two specific extraction wells that had shown to produce the greatest amounts of DNAPL: CO123-PZM and CO125-PZM. A 55-gallon drum was placed next to CO125-PZM

and a 500-gallon holding tank was placed next to CO123-PZM. Product that is removed from the wells is pumped into the holding containers and taken off-site every 90 days.

6.2. OPERATIONS

6.2.1. DPE System

Table C5-3 shows the quarterly summary of total groundwater treated with the DPE system. A total of 5,686,487 gallons of water were extracted from the DPE wells and treated during 2017. Over the course of the entire year, the average recovery rate for the DPE system was approximately 15,580 gpd (11 gpm).

6.2.2. DNAPL Extraction

Table C5-4 summarizes DNAPL occurrence and recovery observed in monitoring wells during 2017 as well as cumulative DNAPL recovered since the beginning of the interim measure. As shown on Table C5-4, approximately 200 gallons of DNAPL were recovered in 2017.

6.3. MONITORING RESULTS

Groundwater samples were collected from the following shallow zone monitoring.

- CO23- PZM008
- CO24-PZM007
- CO26-PZM007
- CO55-PZM000
- CO56-PZP001
- CO57-PZP002
- CO58-PZM001
- CO59-PZP002
- CO60-PZP001

Depth-to-water level measurements were also recorded for each of the groundwater wells in order to calculate static groundwater elevations. The resulting groundwater elevations were used to create groundwater contour maps for the shallow zone groundwater. The depth-to-water level measurements and groundwater elevations are summarized in **Table C5-2.** Groundwater elevation contour maps for each quarter are included as **Figures C5-3 to C5-6.**

Analytical results for groundwater samples collected in 2017 are shown in **Table C5-5.** Concentrations of naphthalene detected in groundwater samples collected in each quarter are displayed on **Figures C5-7 through C5-10.** Time-series graphs of total VOCs collected in groundwater samples are included as **Figures C5-11** and **C5-12.**

6.4. EVALUATION OF EFFECTIVENESS

As summarized on Table C5-4 and Figure C5-2, the Cell 5 groundwater and DNAPL recovery systems removed approximately 360 and 1,900 pounds of hydrocarbons, respectively. This is a total of approximately 2,260 pounds of hydrocarbons removed during 2017 at a rate that is similar to previous periods. The groundwater monitoring data continue to indicate that naphthalene is the most prevalent hydrocarbon constituent in groundwater at Cell 5. As shown on **Figures C5-11 and C5-12**, there have been some temporary upward spikes in the total VOC concentrations at some of the wells over time, although current concentrations are generally similar to the concentrations initially measured in 2014, with some minor increases and decreases.

6.5. SUMMARY AND RECOMMENDATIONS

Cell 5 includes a dual-phase extraction (DPE) system and a DNAPL recovery system for the shallow zone groundwater in the "Turning Basin" side of the former Coke Oven Area. These systems were operated for the majority of the year, resulting in the total removal of approximately 2,260 pounds of hydrocarbons from the Cell 5 area. Since 2014, total VOC concentrations in shallow zone groundwater have demonstrated some fluctuation at some wells, but current concentrations are generally similar to the initial concentrations. Based on this information, the existing system should continue to be operated and monitored in accordance with current practices, although consideration should be given to modifying the system operating parameters and/or expanding or altering the system to maximize hydrocarbon removal amounts and efficiencies. The groundwater data and associated concentration changes will also be evaluated in greater detail to support the design of system improvements and the removal of hydrocarbons from the Cell 5 area.

7.0 CELL 6

7.1. DESCRIPTION

The Cell 6 LNAPL Multi-Phase Extraction (MPE) monitoring and recovery system at the Former Benzol Processing Area was constructed and put into operation in October 2016; manual skimming and bailing of product was started in July 2010. The MPE system separates three extracted phases as follows: LNAPL is skimmed and contained in a 5,000 gallon holding tank; vapor is destroyed via an electric CATOX unit; and water is reinjected via reinjection wells. The layout consists of 53 extraction wells, each individually plumbed with the ability to connect directly to one of the 43 vacuum lines extending from the back of the system container.

7.2. OPERATIONS

LNAPL recovery volumes were recorded during the year, and recovered LNAPL is removed from the site every 90 days. **Table C6-1** summarizes the amount of LNAPL recovered prior to the MPE being put into place, the amount of LNAPL recovered by the MPE system during 2017, and total LNAPL recovered.

7.3. MONITORING RESULTS

There is not a separate groundwater monitoring network associated with the Cell 6 area.

7.4. EVALUATION OF EFFECTIVENESS

Based on the LNAPL recovery amounts presented in **Table C6-1** and graphically shown on **Figure C6-2**, the Cell 6 extraction system removed approximately 12,059 pounds of LNAPL during 2017, at a removal rate that is similar to previous removal rates.

7.5. SUMMARY AND RECOMMENDATIONS

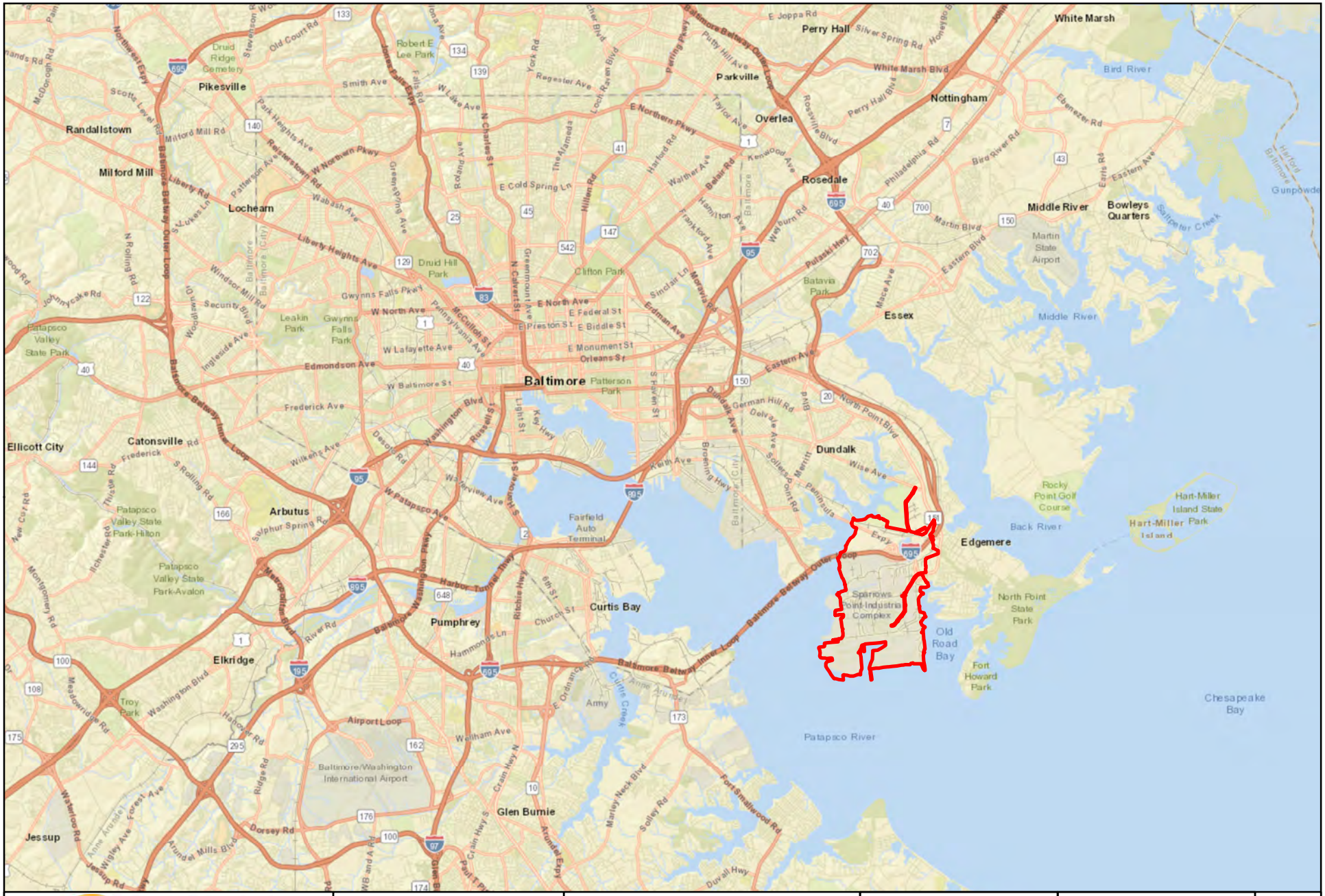
Cell 6 consists of an LNAPL Multi-Phase Extraction (MPE) monitoring and recovery system at the Former Benzol Processing Area, along with manual bailing and skimming. The extraction system, including manual bailing and skimming, removed an estimated 12,059 pounds of LNAPL during 2017, with a cumulative removal amount of approximately 135,880 pounds since LNAPL recovery was started in Cell 6. It is recommended that this system continue to be operated to facilitate LNAPL removal, although the system operating parameters will be re-evaluated in 2018 to help identify any practical system enhancements.

8.0 SUMMARY AND CONCLUSIONS

Overall, the IMs at the former CO area were operated during 2017 in accordance with the general operating plans. Based on the estimated hydrocarbon removal amounts from the remedial activities at Cells 1, 2, 3, 5, and 6, a total of approximately 19,600 pounds of hydrocarbons were removed from this area in 2017.

Based on the results of monitoring data collected at the CO during 2017, it is recommended that: the frequency of groundwater monitoring be reduced from quarterly sample collection to semi-annual sample collection; the systems continue to be operated in accordance with current plans; semi-annual progress reporting be replaced with an annual report (similar to this document); and each of the existing systems be re-evaluated in more detail during 2018 in an attempt to identify cost-effective system improvements or changes. Among other possible changes, shut-down of the Cell 2 AS/AVE system will be considered, along with system improvements to the Cell 3 and Cell 5 areas to increase removal amounts and improve groundwater quality.

FIGURES



ARM Group Inc. Earth Resource Engineers and Consultants	Property Boundary	Tradepoint Atlantic Regional Site View February 2, 2017	EnviroAnalytics Group Area A: Project 150298M Area B: Project 150300M	Tradepoint Atlantic Baltimore County, MD	Figure S-1

0 1.25 2.5 5 Miles

\\armgroup.lcl\CorpData\Projects\EnviroAnalytics Group\150298M EAG_Sparrows Point Area A\GIS\Site-wide Regional Figures.mxd

N

EnviroAnalytics Group

1 inch = 330 feet

0 300 600 Feet

Former Coke Oven Area Interim Measures Cell Locations

Date: 1/11/2018

Legend

Former Coke Oven Area Boundary

Former COA IM Cells

Figure S-2

N

EnviroAnalytics Group

1 inch = 63 feet

0 55 110 Feet

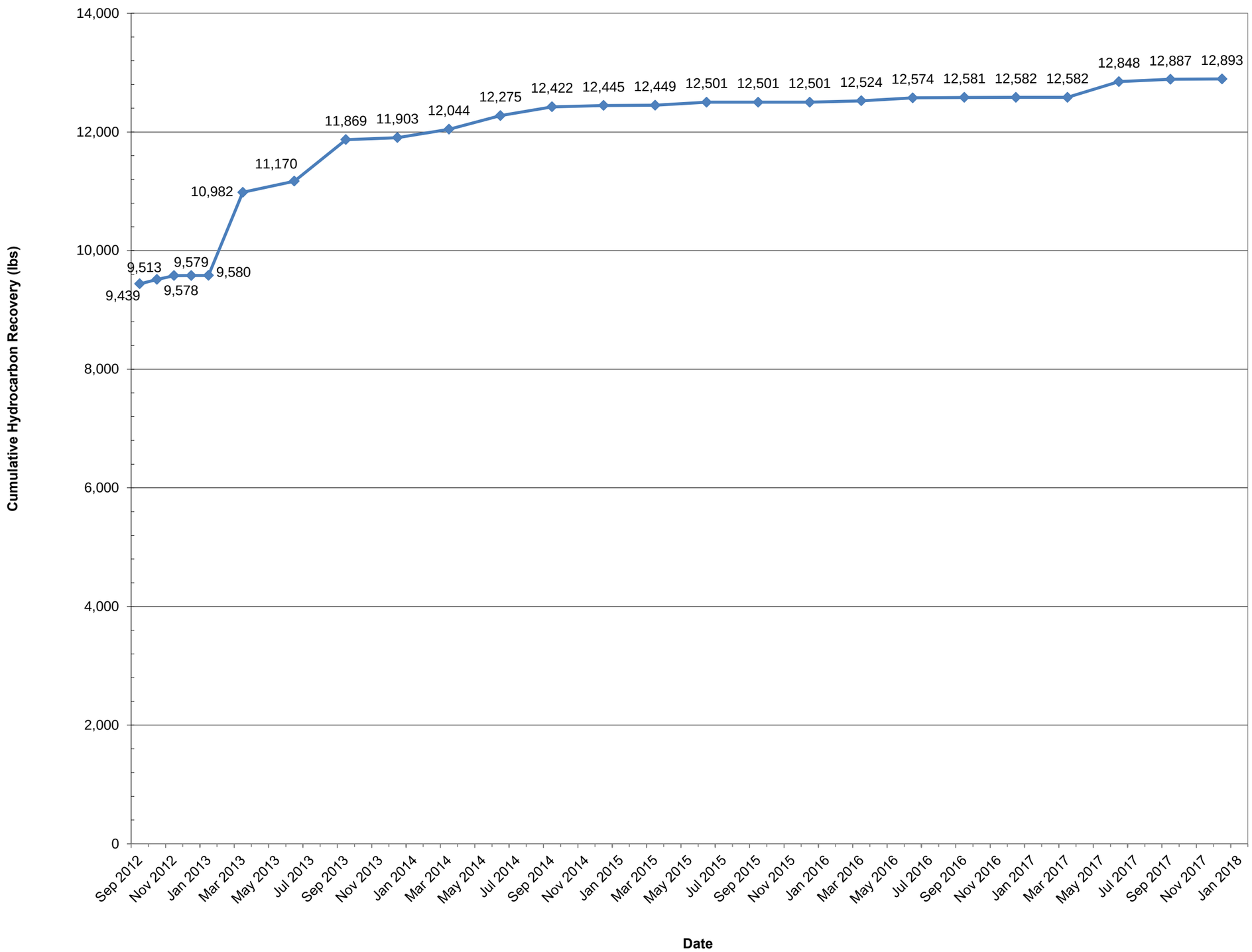
Former Coke Oven Area Cell 1 AS/SVE System Layout

Date: 10/27/2017

Legend

- Monitoring Wells
- Air Sparge Wells
- Vapor Extraction Headers
- Vapor Collection Trench

Figure C1-1



LEGEND

Cell 1

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Environmental Engineers

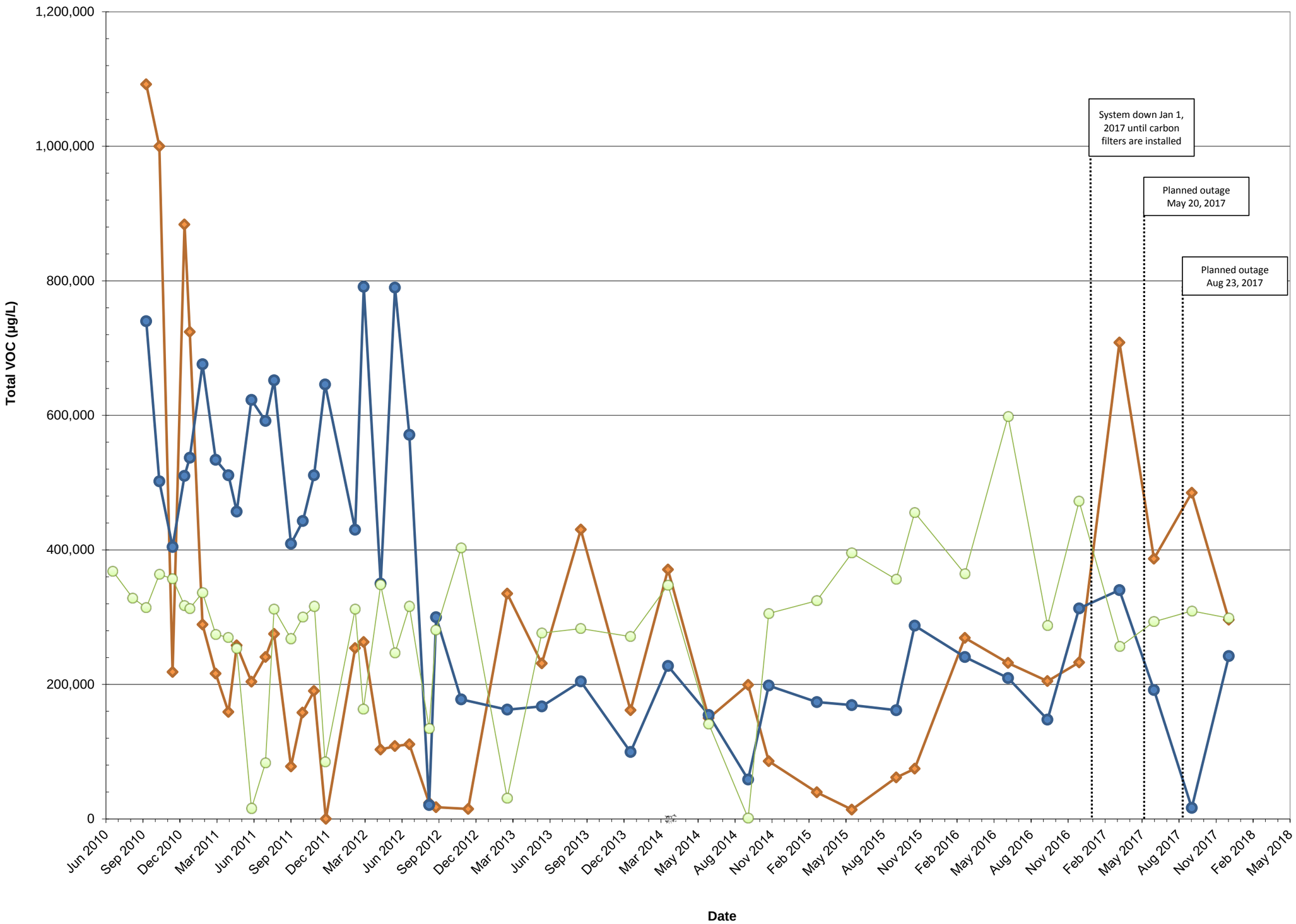
Project
Sparrow Point Terminal, LLC
Baltimore, Maryland

CUMULATIVE SUMMARY OF ESTIMATED HYDROCARBON RECOVERY
FORMER COKE OVEN AREA
CELL 1 INTERIM REMEDIAL MEASURES

Project Number	File Number
170674M	

Date	Figure
January 18, 2018	C1-2

PE/RG	PM	DR



LEGEND

- CO18-PZM006
- CO02-PZM006
- CO93-PZMxxx

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Environmental Engineers

Project

Tradepoint Atlantic
Baltimore, Maryland

MEASURED GROUNDWATER VOC CONCENTRATION BY MONTH CELL 1: PROTOTYPE AS/SVE SYSTEM IN THE FORMER BENZOL PROCESSING AREA

Date	Figure
February 8, 2018	C1-3

PE/RG	PM	DR

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

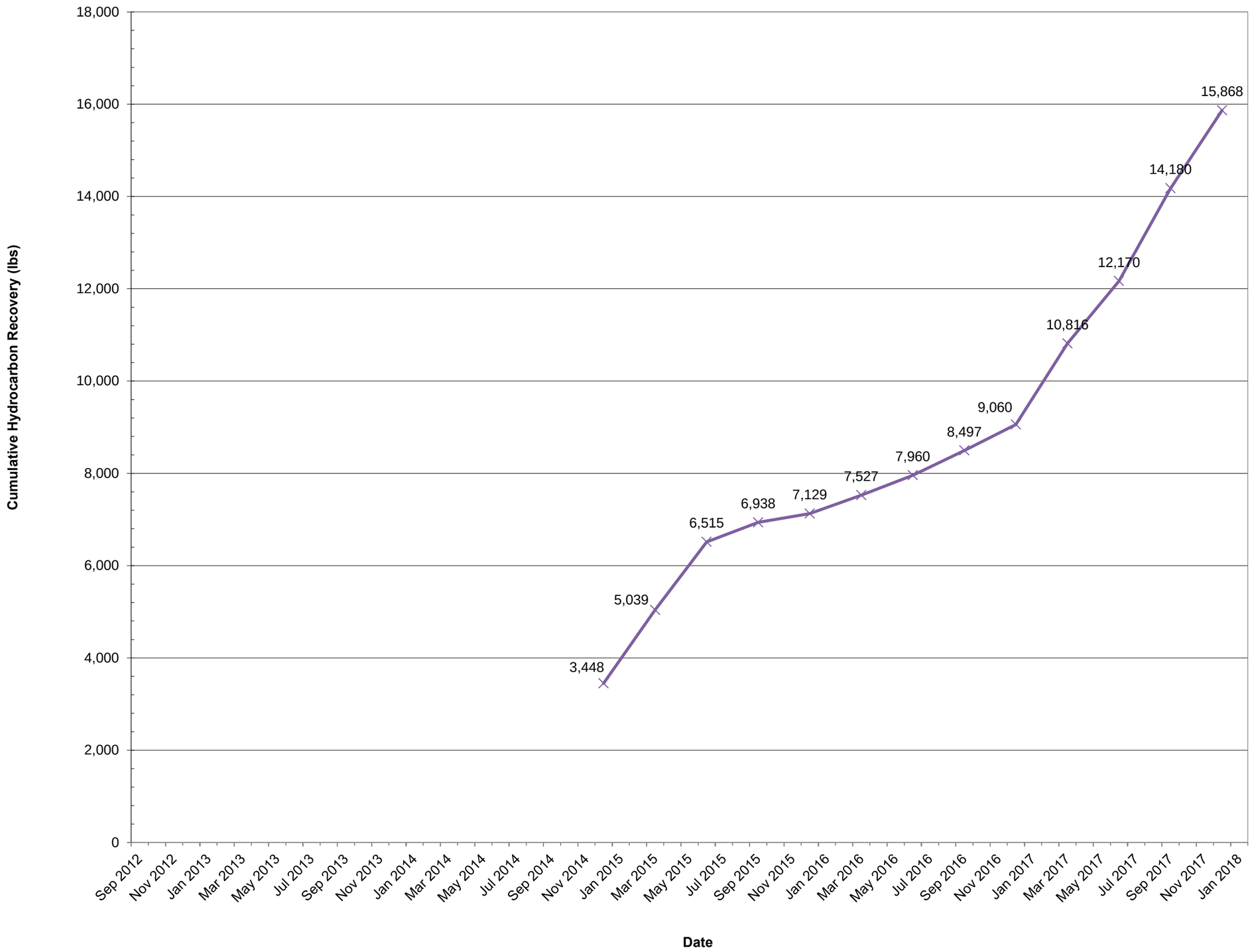
Former Coke Oven Area
Cell 2 System Layout
AS/SVE and GW P&T

Date: 10/27/2017

Legend

- Monitoring Well Shallow Zone
- Monitoring Well Intermediate Zone
- Groundwater Extraction Wells
- Reinjection Wells
- Vapor Extraction Headers
- Air Sparge Wells
- Vapor Collection trench

Figure C2-1



LEGEND

Cell 2

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CUMULATIVE SUMMARY OF ESTIMATED HYDROCARBON RECOVERY
FORMER COKE OVEN AREA
CELL 2 INTERIM REMEDIAL MEASURES

Project Number	File Number
170674M	

Date	Figure
January 11, 2018	C2-2

PE/RG	PM	DR

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q1 Groundwater Elevation
Contours Shallow Zone
Date: 4/27/2017

Legend

- Monitoring Well Shallow Zone
- Groundwater Extraction Wells
- Reinjection Wells
- Groundwater Elevation Contours Shallow Zone

Water Levels Recorded
3/20/2017-3/21/2017

Figure C2-3

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q2 Groundwater Elevation Contours Shallow Zone
Date: 1/17/2017

Legend

- Monitoring Well Shallow Zone
- Reinjection Wells
- Groundwater Extraction Wells
- Groundwater Elevation Contours Shallow Zone

Water Levels Recorded
6/14/2017-6/15/2017

Figure C2-4

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q3 Groundwater Elevation
Contours Shallow Zone

Date: 10/30/2017

Legend

- Monitoring Well Shallow Zone
- Reinjection Wells
- Groundwater Extraction Wells
- Groundwater Elevation Contours Shallow Zone

Water Levels Recorded
10/17/2017

Figure C2-5

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q4 Groundwater Elevation
Contours Shallow Zone
Date: 1/17/2017

Legend

- Monitoring Well Shallow Zone
- Reinjection Wells
- Groundwater Extraction Wells
- Groundwater Elevation Contours Shallow Zone

Water Levels Recorded
12/12/2017-12/14/2017

Figure C2-6

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q1 Groundwater Elevation
Contours Intermediate Zone
Date: 4/27/2017

Legend

- Monitoring Well Intermediate Zone
- Groundwater Extraction Wells
- Reinjection Wells
- Groundwater Elevation Contours Intermediate Zone

Water Levels Recorded
3/20/2017-3/21/2017

Figure C2-7

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

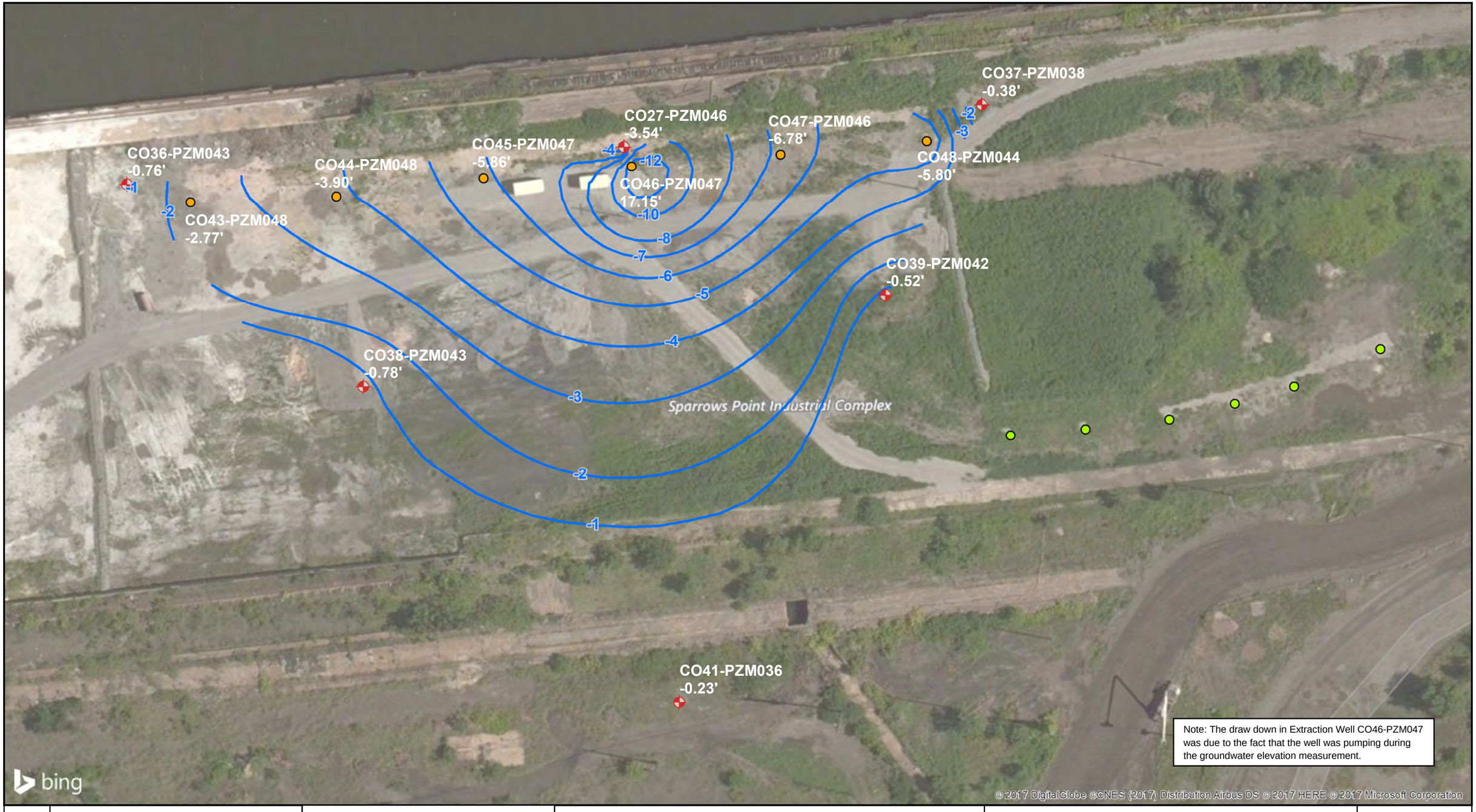
Former Coke Oven Area
Cell 2 Q2 Groundwater Elevation
Contours Intermediate Zone
Date: 1/17/2017

Legend

- Monitoring Well Intermediate Zone
- Groundwater Extraction Wells
- Reinjection Wells
- Groundwater Elevation Contours Intermediate Zone

Water Levels Recorded
6/14/2017-6/15/2017

Figure C2-8



Note: The draw down in Extraction Well CO46-PZM047 was due to the fact that the well was pumping during the groundwater elevation measurement.

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q3 Groundwater Elevation
Contours Intermediate Zone

Date: 10/30/2017

Legend

- Monitoring Well Intermediate Zone
- Groundwater Extraction Wells
- Reinjection Wells
- Groundwater Elevation Contours Intermediate Zone

Water Levels Recorded
10/17/2017

Figure C2-9

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q4 Groundwater Elevation
Contours Intermediate Zone
Date: 1/17/2017

Legend

- Monitoring Well Intermediate Zone
- Groundwater Extraction Wells
- Reinjection Wells
- Groundwater Elevation Contours Intermediate Zone

Water Levels Recorded
12/12/2017-12/14/2017

Figure C2-10

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q1 Benzene Concentrations
Intermediate Zone
Date: 4/27/2017

Legend

- Monitoring Well Intermediate Zone
- Groundwater Extraction Wells
- Reinjection Wells

Monitoring Wells Sampled 3/20/2017-3/21/2017

Results in ug/L

Figure C2-11

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q2 Benzene Concentrations
Intermediate Zone
Date: 1/12/2018

Legend

- Monitoring Well Intermediate Zone
- Groundwater Extraction Wells
- Reinjection Wells

Monitoring Wells Sampled 6/14/2017-6/15/2017

Results in ug/L

Figure C2-12

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q3 Benzene Concentrations
Intermediate Zone
Date: 10/27/2017

Legend

- Monitoring Well Intermediate Zone
- Groundwater Extraction Wells
- Reinjection Wells

Monitoring Wells Sampled 9/12/2017-9/13/2017

Results in ug/L

Figure C2-13

N

EnviroAnalytics Group

1 inch = 62 feet

0 55 110 Feet

Former Coke Oven Area
Cell 2 Q4 Benzene Concentrations
Intermediate Zone
Date: 1/12/2018

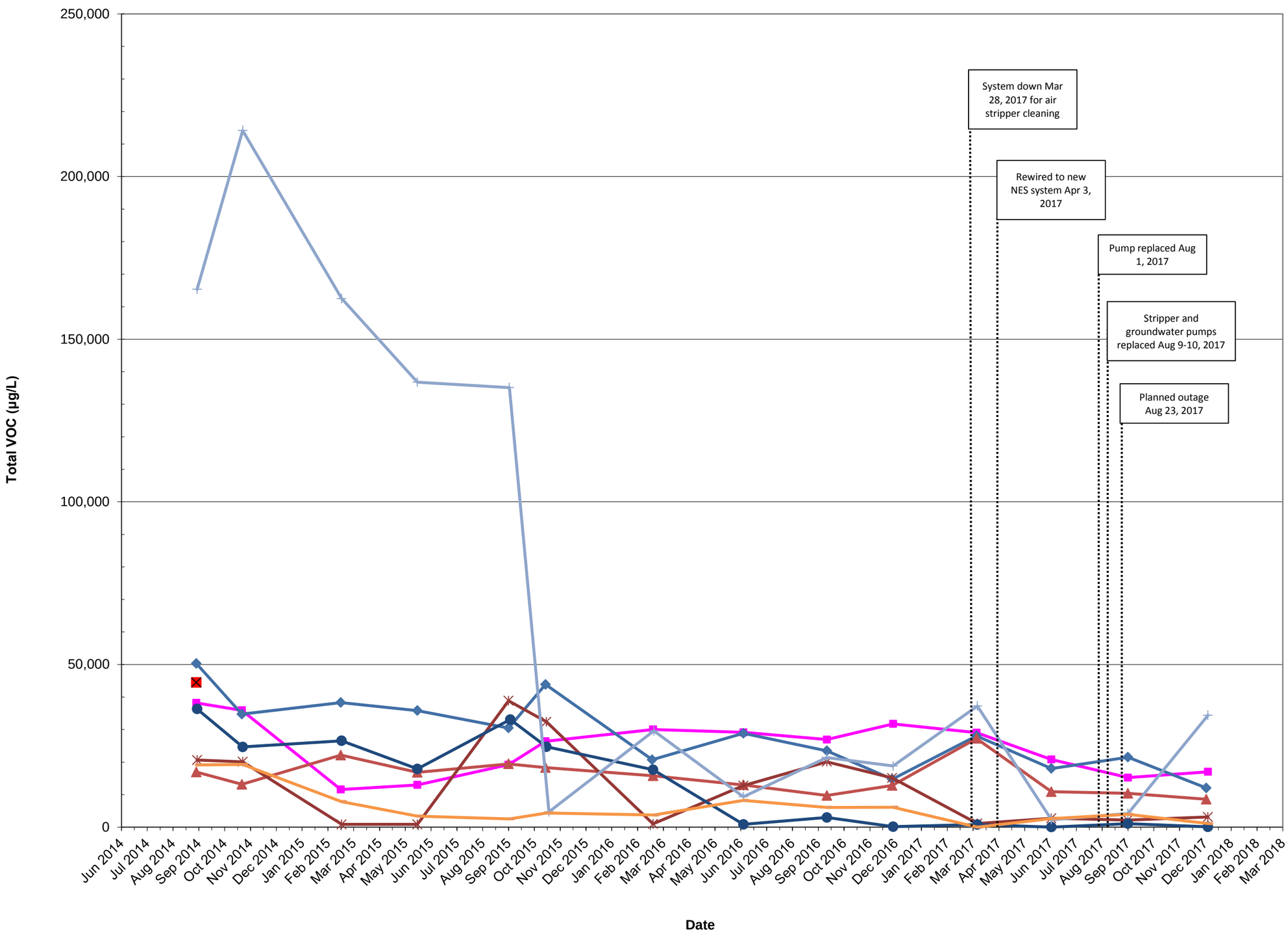
Legend

- Monitoring Well Intermediate Zone
- Groundwater Extraction Wells
- Reinjection Wells

Monitoring Wells Sampled 12/12/2017-12/14/2017

Results in ug/L

Figure C2-14



LEGEND

- CO27-PZM012
- CO36-PZM008
- CO37-PZM003
- CO38-PZM006
- CO39-PZM007
- CO40-PZM008
- CO41-PZM001
- CO42-PZM004

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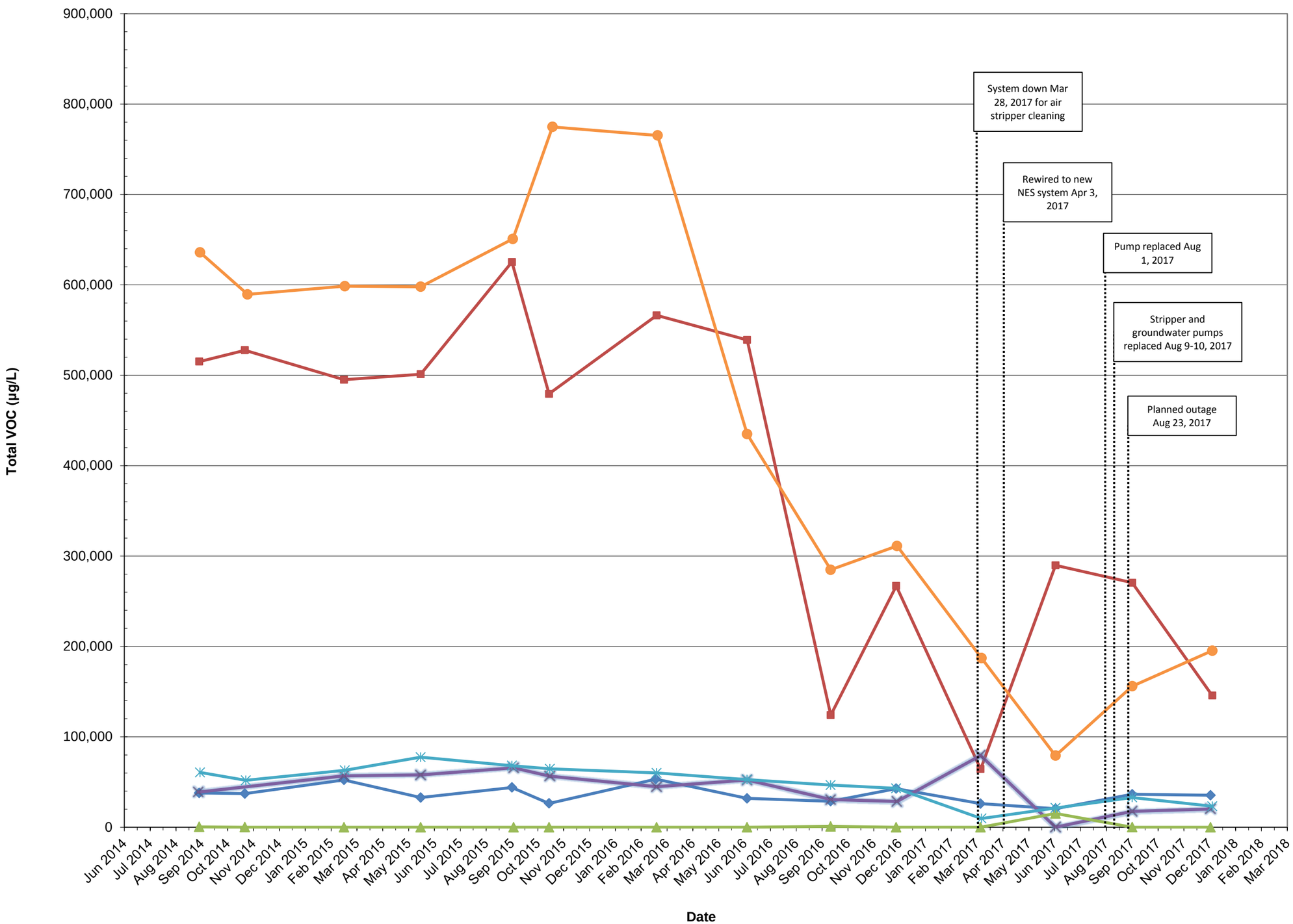
Baltimore, Maryland

MEASURED GROUNDWATER VOC CONCENTRATION BY MONTH
CELL 2: GROUNDWATER PUMP AND TREAT SYSTEM
SHALLOW ZONE

Date	Figure
February 8, 2018	C2-15

PE/RG	PM	DR



LEGEND

- CO27-PZM046
- CO36-PZM043
- CO37-PZM038
- CO38-PZM043
- CO39-PZM042
- CO41-PZM036

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MEASURED GROUNDWATER VOC CONCENTRATION BY MONTH
CELL 2: GROUNDWATER PUMP AND TREAT SYSTEM
INTERMEDIATE ZONE

Date	Figure
February 8, 2018	C2-16

PE/RG	PM	DR

N

EnviroAnalytics Group

1 inch = 51 feet

0 45 90 Feet

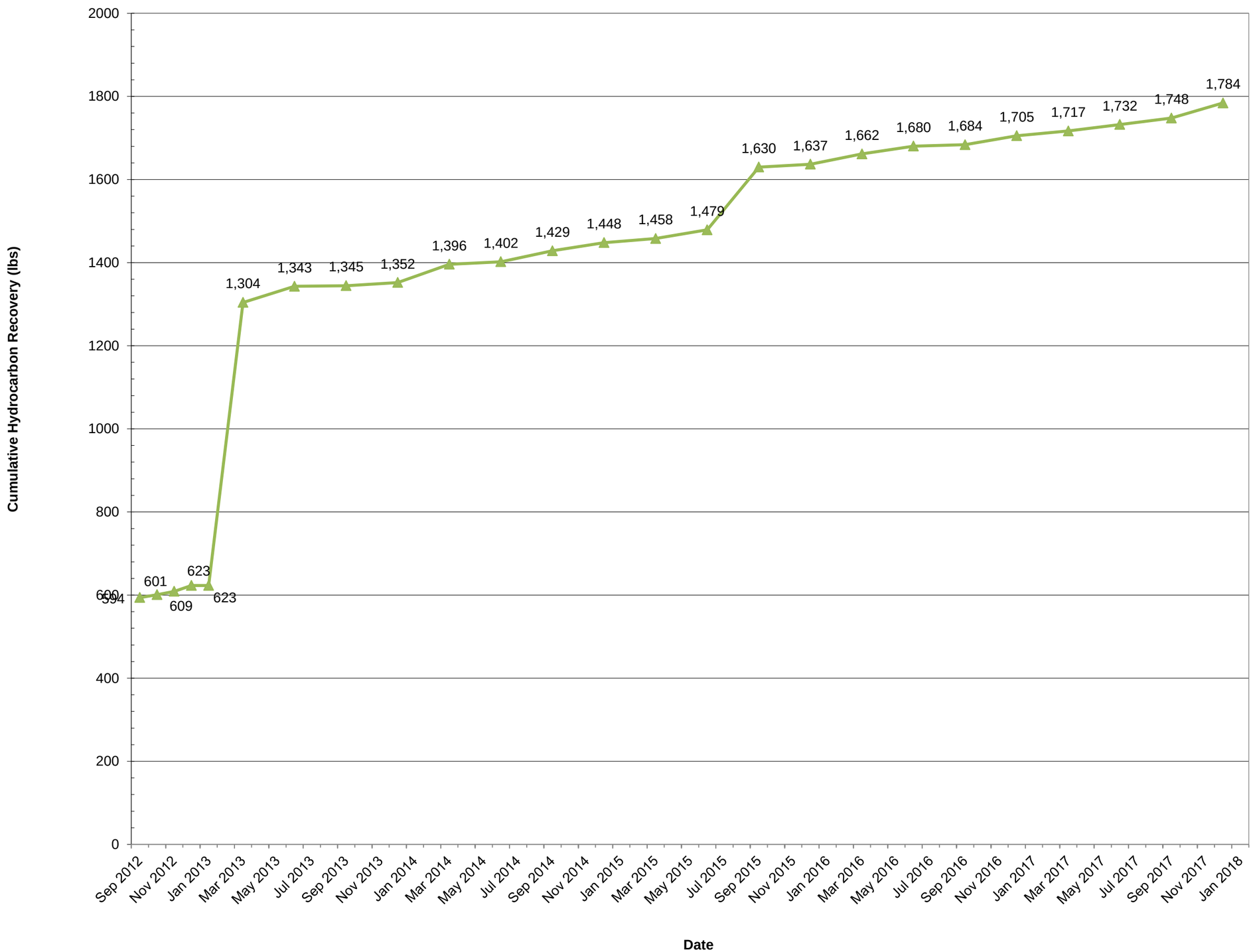
Former Coke Oven Area Cell 3 AS/SVE System Layout

Date: 10/27/2017

Legend

- Monitoring Wells
- Air Sparge Wells
- Vapor Extraction Headers
- Vapor Collection Trench

Figure C3-1



LEGEND

Cell 3

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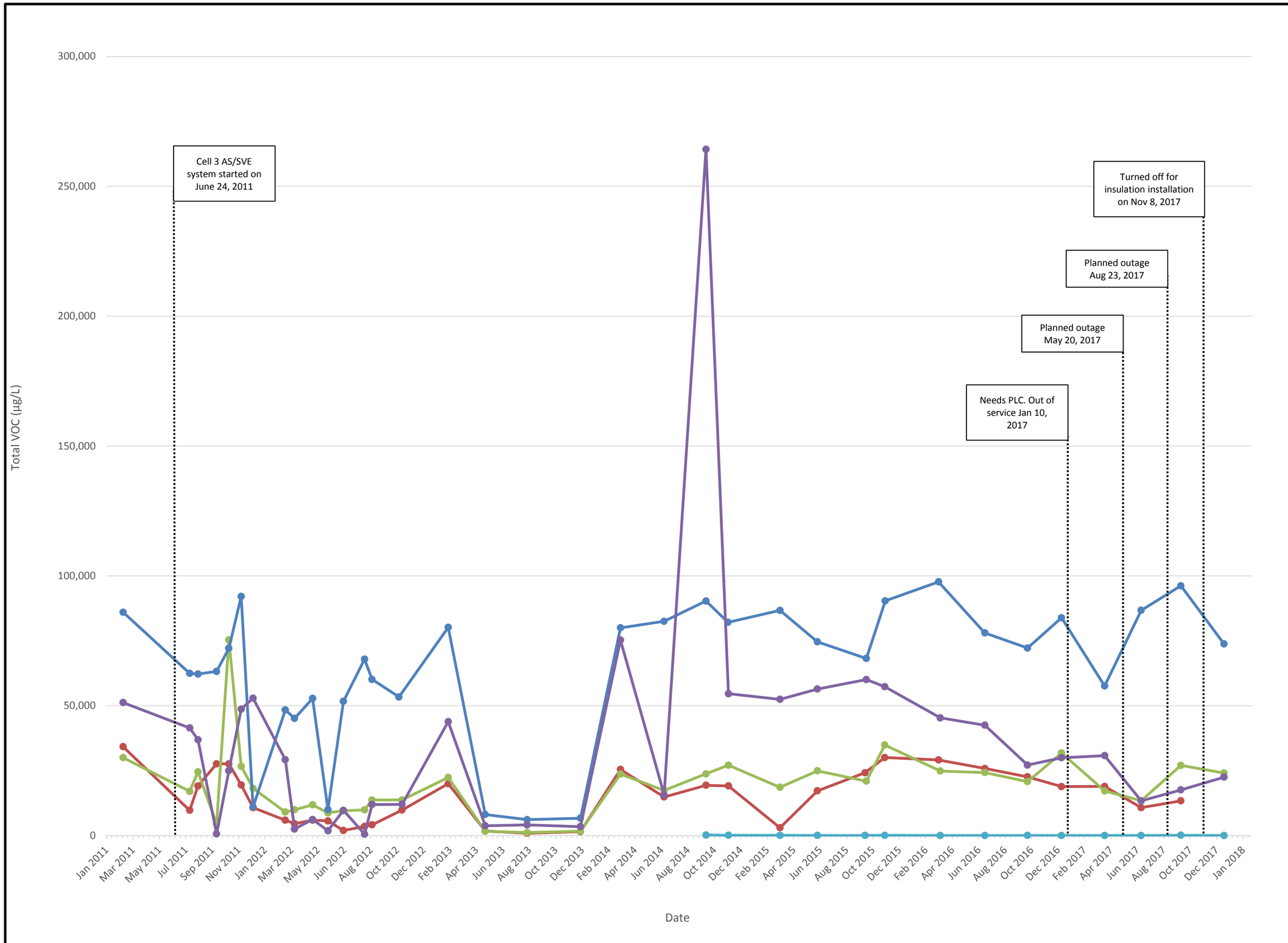
CUMULATIVE SUMMARY OF ESTIMATED HYDROCARBON RECOVERY
FORMER COKE OVEN AREA
CELL 3 INTERIM REMEDIAL MEASURES

Project Number	File Number
170674M	

Date	Figure
January 18, 2018	C3-2

PE/RG	PM	DR



LEGEND

- CO101-PZMxxx
- CO102-PZMxxx
- CO104-PZMxxx
- CO30-PZM015
- CO103-PZMxxx

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Baltimore, Maryland

MEASURED GROUNDWATER VOC CONCENTRATION BY MONTH CELL 3: PROTOTYPE AS/SVE SYSTEM IN THE COVE AREA

Date	Figure
February 8, 2018	C3-3

PE/RG	PM	DR

N

EnviroAnalytics Group

1 inch = 120 feet

0 105 210 Feet

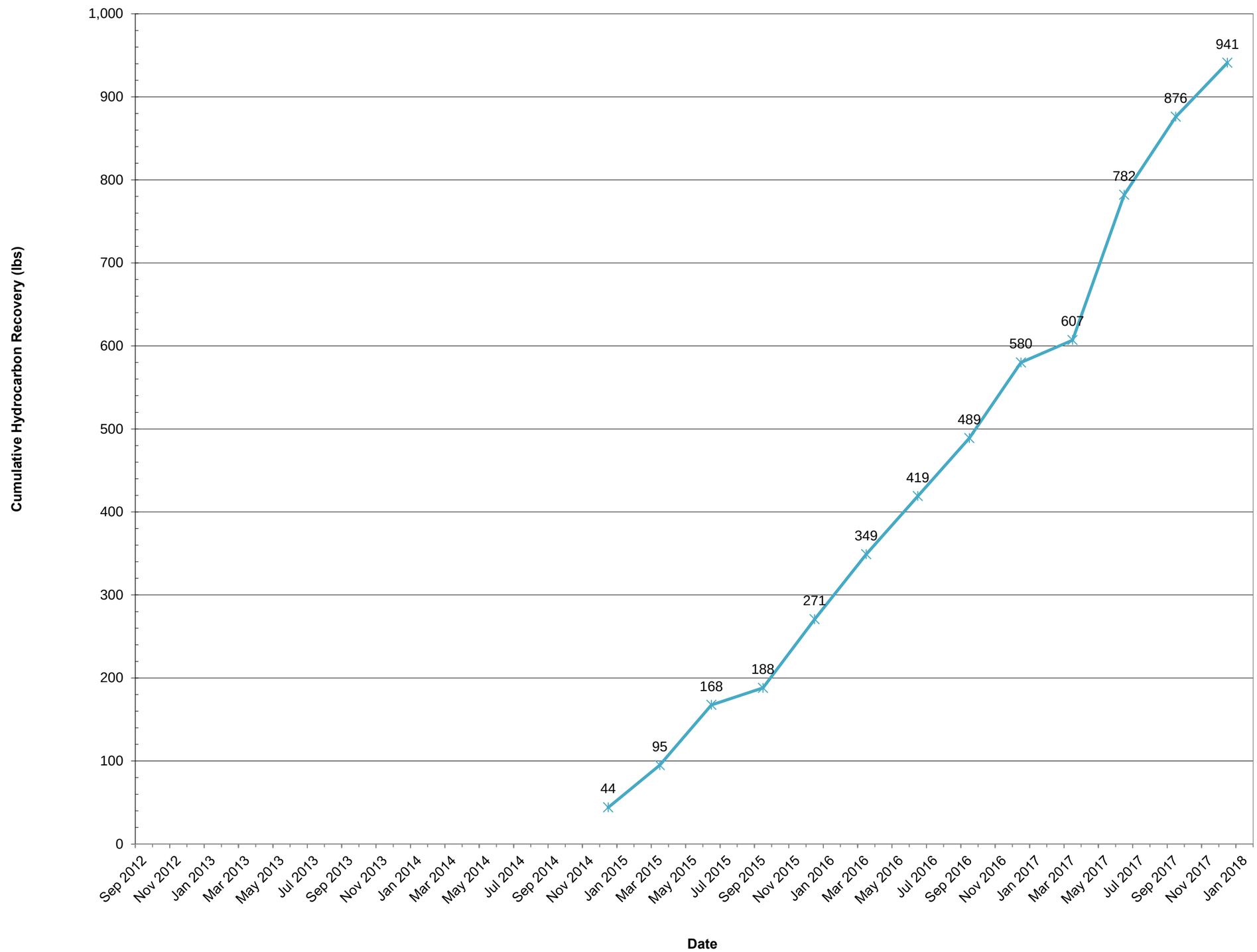
Former Coke Oven Area
Cell 5 System Layout
DPE System and DNAPL Recovery Pumps

Date: 10/27/2017

Legend

- Monitoring Wells
- DPE Wells
- Reinjection Wells
- DNAPL Recovery Well
- Extraction Area
- Naphthalene Source Area

Figure C5-1



LEGEND

Cell 5

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CUMULATIVE SUMMARY OF ESTIMATED HYDROCARBON RECOVERY
FORMER COKE OVEN AREA
CELL 5 INTERIM REMEDIAL MEASURES

Project Number	File Number
170674M	

Date	Figure
January 11, 2018	C5-2

PE/RG	PM	DR

N

EnviroAnalytics Group

1 inch = 120 feet

0 105 210 Feet

Former Coke Oven Area
Cell 5 Q1 Groundwater
Elevation Shallow Zone
Date: 4/28/2017

Legend

- Monitoring Wells
- Reinjection Wells
- DPE Wells

Water Levels Recorded
3/22/2017-3/23/2017

Figure C5-3

N

EnviroAnalytics Group

1 inch = 120 feet

0 100 200 Feet

Former Coke Oven Area
Cell 5 Q2 Groundwater
Elevation Shallow Zone

Date: 2/8/2018

Legend

- Monitoring Well
- DPE Well
- Reinjection Well
- Groundwater Elevation Contour (ft amsl)

Water Levels Recorded
6/12/2017-6/13/2017

Figure C5-4

N

EnviroAnalytics Group

1 inch = 120 feet

0 100 200 Feet

Former Coke Oven Area
Cell 5 Q3 Groundwater
Elevation Shallow Zone

Date: 2/8/2018

Legend

- Monitoring Well
- DPE Well
- Reinjection Well
- Groundwater Elevation Contour (ft amsl)

Water Levels Recorded 10/18/2017

Figure C5-5

N

EnviroAnalytics Group

1 inch = 120 feet

0 105 210 Feet

Former Coke Oven Area
Cell 5 Q4 Groundwater
Elevation Shallow Zone

Date: 2/8/2018

Legend

- Monitoring Well
- DPE Well
- Reinjection Well
- Groundwater Elevation Contour (ft amsl)

Water Levels Recorded
12/15/2017 - 12/18/2017

Figure C5-6

N

EnviroAnalytics Group

1 inch = 120 feet

0 105 210 Feet

Former Coke Oven Area
Cell 5 Q1 Naphthalene Concentrations
Shallow Zone
Date: 4/27/2017

Legend

- Monitoring Wells
- Reinjection Wells
- DPE Wells

Monitoring Wells Sampled 3/22/2017-3/23/2017

Results in ug/L

Figure C5-7

N

EnviroAnalytics Group

1 inch = 120 feet

0 105 210 Feet

Former Coke Oven Area
Cell 5 Q2 Naphthalene Concentrations
Shallow Zone
Date: 1/12/2018

Legend

- Monitoring Wells
- Reinjection Wells
- DPE Wells

Monitoring Wells Sampled 6/12/2017-6/13/2017

Results in ug/L

Figure C5-8

N

EnviroAnalytics Group

1 inch = 120 feet

0 105 210 Feet

Former Coke Oven Area
Cell 5 Q3 Naphthalene Concentrations
Shallow Zone
Date: 10/27/2017

Legend

- Monitoring Wells
- Reinjection Wells
- DPE Wells

Monitoring Wells Sampled 9/14/2017

Results in ug/L

Figure C5-9

N

EnviroAnalytics Group

1 inch = 120 feet

0 105 210 Feet

Former Coke Oven Area
Cell 5 Q4 Naphthalene Concentrations
Shallow Zone
Date: 1/12/2018

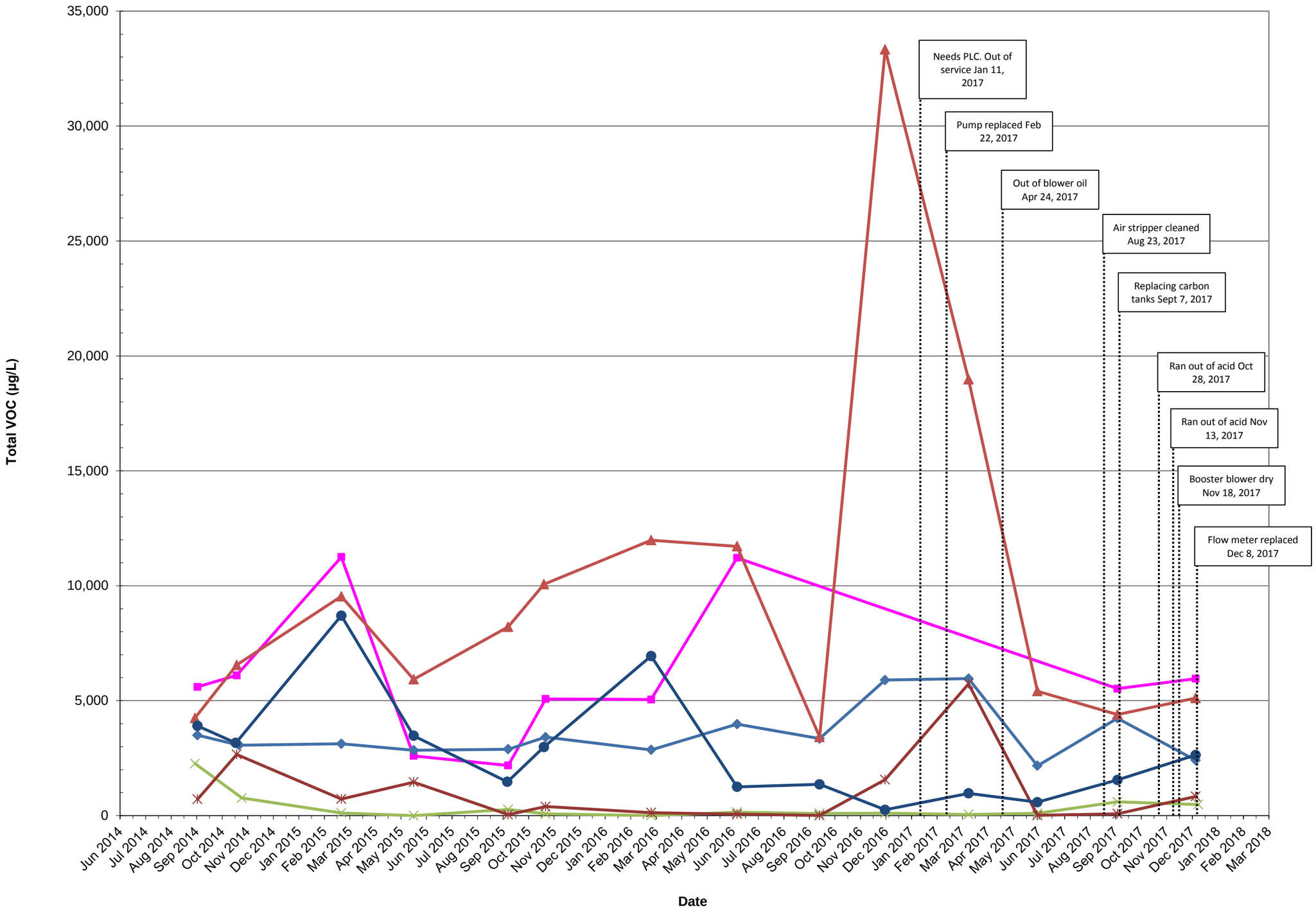
Legend

- Monitoring Wells
- Reinjection Wells
- DPE Wells

Monitoring Wells Sampled 12/15/2017-12/18/2017

Results in ug/L

Figure C5-10



LEGEND

- CO23-PZM008
- CO24-PZM007
- CO55-PZM000
- CO56-PZP001
- CO59-PZP002
- CO60-PZP001

EnviroAnalytics Group

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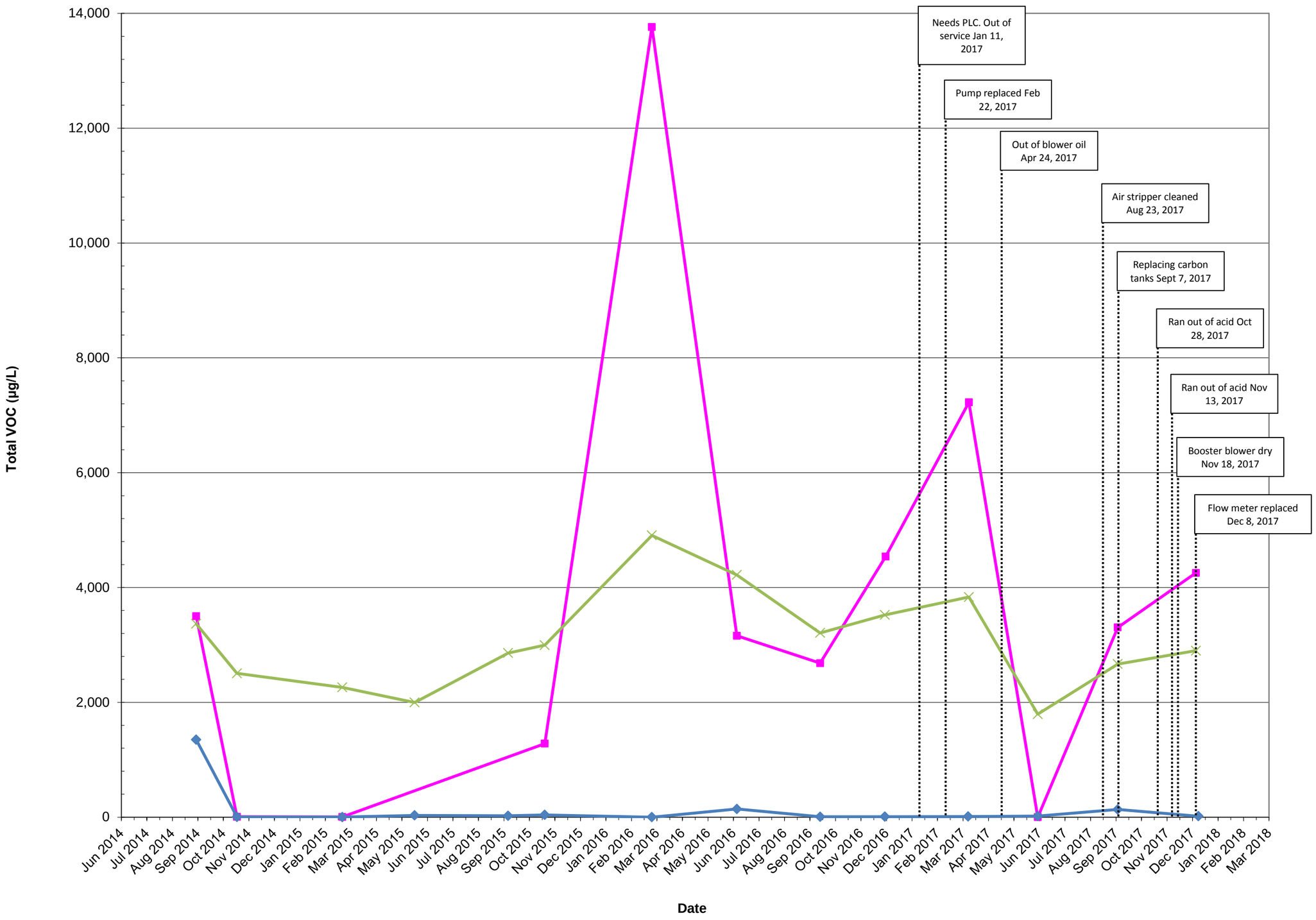
Baltimore, Maryland

MEASURED GROUNDWATER VOC CONCENTRATION BY MONTH CELL 5: DPE GROUNDWATER PUMP AND TREAT SYSTEM

Date	Figure
February 8, 2018	C5-11

PE/RG	PM	DR



LEGEND

- CO26-PZM007
- CO57-PZP002
- CO58-PZM001

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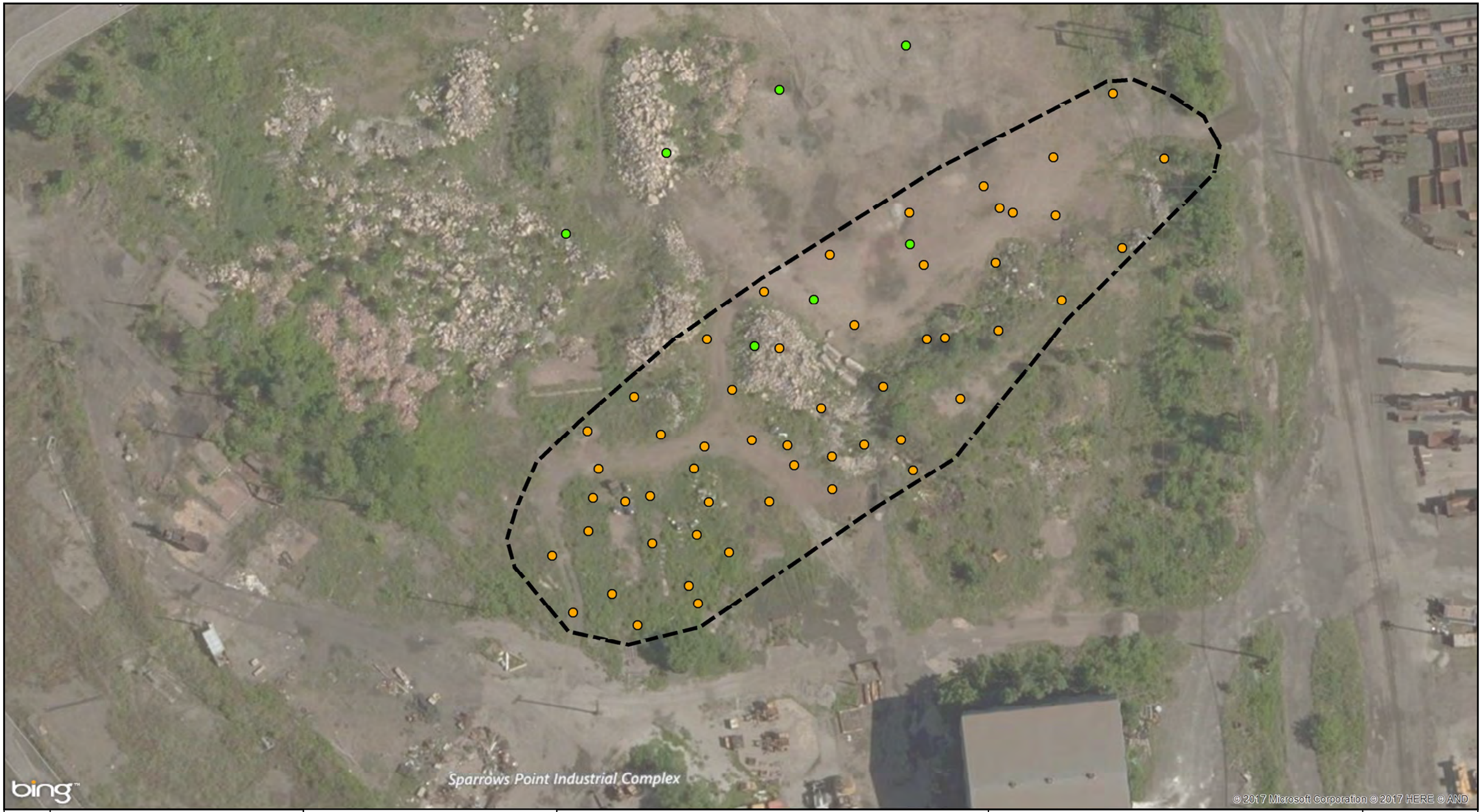
Baltimore, Maryland

MEASURED GROUNDWATER VOC CONCENTRATION BY MONTH CELL 5: DPE GROUNDWATER PUMP AND TREAT SYSTEM

Date	Figure
February 8, 2018	C5-12

PE/RG	PM	DR



N

EnviroAnalytics Group

1 inch = 60 feet

0 50 100 Feet

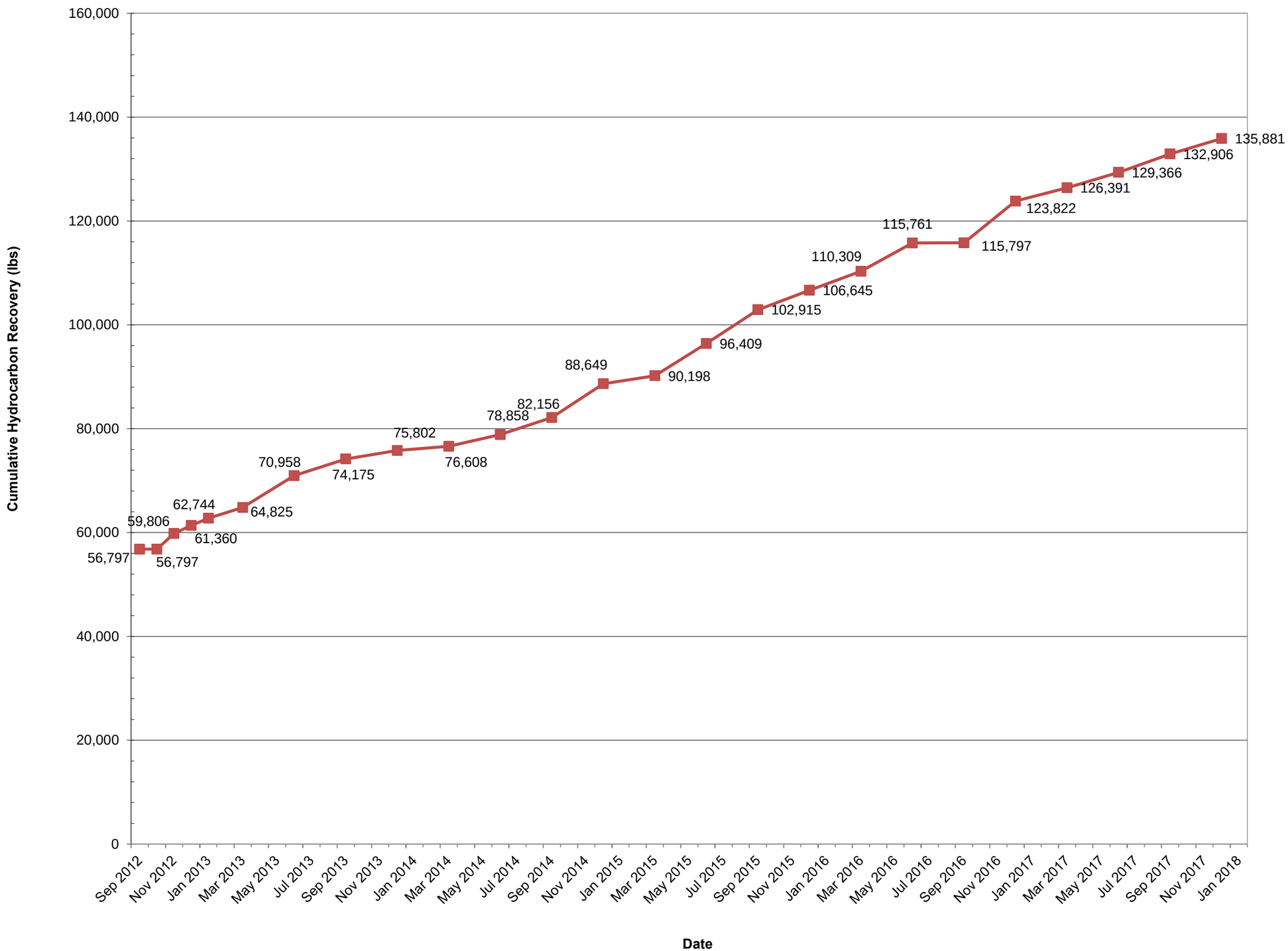
Former Coke Oven Area Cell 6 System Layout

Date: 10/27/2017

Legend

- Reinjection Wells
- Extraction Wells
- Estimated Source Area

Figure C6-1



LEGEND

Cell 6

EnviroAnalytics Group

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Sparrow Point Terminal, LLC
Baltimore, Maryland

CUMULATIVE SUMMARY OF ESTIMATED HYDROCARBON RECOVERY
FORMER COKE OVEN AREA
CELL 6 INTERIM REMEDIAL MEASURES

Project Number	File Number
170674M	

Date	Figure
January 22, 2018	C6-2

PE/RG	PM	DR

TABLES

Table C1-1: Summary of Operation Conditions
Cell 1: Prototype AS/SVE System in Former Benzol Processing Area

Cell 1 2017 Estimated Hydrocarbon Recovery

Parameter	Units	Q1* 1/1 - 3/31	Q2 4/1 - 6/30	Q3 7/1 - 9/30	Q4 10/1 - 12/31	Total/Average 1/1 - 12/31
Flow Rate	SCFM	*System Off*	377	393	417	396
Average Concentrations	ug/m^3	*NS*	107,766	18,475	2,454	128,695
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	*NS*	0.1522	0.0272	0.0038	0.061
Total CATOX/VGAC Operating Time	hours	0	1,745	1,452	1,573	4,770
Overall CATOX/VGAC Operational Time	%	0.0%	80.8%	66.5%	71.2%	54.6%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	*NS*	266	39.5	6.03	311

NS = Not Sampled

*Converted from CATOX to VGAC mid-way through January

Cell 1 Cumulative Summary of Estimated Hydrocarbon Recovery

August 3, 2010 - December 31, 2017

Parameter	Units	Quantity
Total CATOX/VGAC Operating Time	hours	30,022
Overall CATOX/VGAC Operational Time	%	46.2%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	12,893
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.4295

Table C1-2 - CATOX/VGAC Influent Analytical Results
Cell 1: AS/SVE System in Former Benzol Processing Area

Month		January*	February	March	April	May	June
Analyte (TO-15 Organics)	**Units**						
1,1,1-Trichloroethane	ug/m^3	*NS*	*NS*	*NS*	*43.7 U*	*327 U*	*43.7 U*
1,1,2,2-Tetrachloroethane	ug/m^3	*NS*	*NS*	*NS*	*54.9 U*	*412 U*	*54.9 U*
1,1,2-Trichloroethane	ug/m^3	*NS*	*NS*	*NS*	*21.8 U*	*164 U*	*21.8 U*
1,1,2-Trichlorotrifluoroethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,1-Dichloroethane	ug/m^3	*NS*	*NS*	*NS*	*32.4 U*	*243 U*	*32.4 U*
1,1-Dichloroethene	ug/m^3	*NS*	*NS*	*NS*	*31.7 U*	*238 U*	*31.7 U*
1,2,4-Trichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2,4-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2-Dibromoethane (EDB)	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2-Dichloroethane	ug/m^3	*NS*	*NS*	*NS*	*16.2 U*	*121 U*	*16.2 U*
1,2-Dichloropropane	ug/m^3	*NS*	*NS*	*NS*	*37 U*	*277 U*	*37 U*
1,3,5-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,3-Butadiene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,3-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,4-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
2-Butanone (MEK)	ug/m^3	*NS*	*NS*	*NS*	*23.6 U*	*177 U*	*23.6 U*
2-Hexanone	ug/m^3	*NS*	*NS*	*NS*	*32.8 U*	*246 U*	*32.8 U*
2-Propanol	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
4-Ethyltoluene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
4-Methyl-2-pentanone (MIBK)	ug/m^3	*NS*	*NS*	*NS*	*32.8 U*	*246 U*	*32.8 U*
Acetone	ug/m^3	*NS*	*NS*	*NS*	*1900 U*	*14300 U*	*1900 U*
Benzene	ug/m^3	*NS*	*NS*	*NS*	**159,000**	**61,900**	**55,300**
Benzyl chloride	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Bromodichloromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Bromoform	ug/m^3	*NS*	*NS*	*NS*	*82.7 U*	*620 U*	*82.7 U*
Bromomethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Carbon disulfide	ug/m^3	*NS*	*NS*	*NS*	*24.9 U*	*187 U*	*24.9 U*
Carbon tetrachloride	ug/m^3	*NS*	*NS*	*NS*	*25.2 U*	*189 U*	*25.2 U*
Chlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*36.8 U*	*276 U*	*36.8 U*
Chloroethane	ug/m^3	*NS*	*NS*	*NS*	*21.1 U*	*158 U*	*21.1 U*
Chloroform	ug/m^3	*NS*	*NS*	*NS*	*19.5 U*	*146 U*	*19.5 U*
Chloromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
cis-1,2-Dichloroethene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
cis-1,3-Dichloropropene	ug/m^3	*NS*	*NS*	*NS*	*36.3 U*	*272 U*	*36.3 U*
Cyclohexane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Dibromochloromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Dichlorodifluoromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Dichlorotetrafluoroethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Ethanol	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Ethyl acetate	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Ethylbenzene	ug/m^3	*NS*	*NS*	*NS*	**559**	*261 U*	**251**
Hexachloro-1,3-butadiene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
m&p-Xylene	ug/m^3	*NS*	*NS*	*NS*	**3,030**	**1,350**	**1,150**
Methylene Chloride	ug/m^3	*NS*	*NS*	*NS*	*155 U*	*1160 U*	*155 U*
Methyl-tert-butyl ether	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Naphthalene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
n-Heptane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
n-Hexane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
o-Xylene	ug/m^3	*NS*	*NS*	*NS*	**1,890**	**893**	**515**
Propylene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Styrene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Tetrachloroethene	ug/m^3	*NS*	*NS*	*NS*	*27.1 U*	*203 U*	*27.1 U*
Tetrahydrofuran	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Toluene	ug/m^3	*NS*	*NS*	*NS*	**30,100**	**4,410**	**2,950**
trans-1,2-Dichloroethene	ug/m^3	*NS*	*NS*	*NS*	*31.7 U*	*238 U*	*31.7 U*
trans-1,3-Dichloropropene	ug/m^3	*NS*	*NS*	*NS*	*36.3 U*	*272 U*	*36.3 U*
Trichloroethene	ug/m^3	*NS*	*NS*	*NS*	*21.5 U*	*161 U*	*21.5 U*
Trichlorofluoromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Vinyl acetate	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Vinyl chloride	ug/m^3	*NS*	*NS*	*NS*	*20.4 U*	*153 U*	*20.4 U*
Total Volatile Organics	ug/m^3	*NS*	*NS*	*NS*	**194,579**	**68,553**	**60,166**

Notes:

BOLD = Analyte detected

ug/m^3 = micro grams per cubic meter

U = Non-detect

NS = Not Sampled

*Converted from CATOX to VGAC mid-way through the month

Table C1-2 - CATOX/VGAC Influent Analytical Results
Cell 1: AS/SVE System in Former Benzol Processing Area

Month		July	August	September	October	November	December
Analyte (TO-15 Organics)	**Units**						
1,1,1-Trichloroethane	ug/m^3	*54.6 U*	*43.7 U*	**22.2**	**21.6**	**2.6**	*NS*
1,1,2,2-Tetrachloroethane	ug/m^3	*68.7 U*	*54.9 U*	*27.5 U*	*0.88 U*	*0.88 U*	*NS*
1,1,2-Trichloroethane	ug/m^3	*27.3 U*	*21.8 U*	*10.9 U*	*0.69 U*	*0.69 U*	*NS*
1,1,2-Trichlorotrifluoroethane	ug/m^3	*NS*	*NS*	*NS*	*2 U*	*2 U*	*NS*
1,1-Dichloroethane	ug/m^3	*40.5 U*	*32.4 U*	*16.2 U*	*1 U*	*1 U*	*NS*
1,1-Dichloroethene	ug/m^3	*39.6 U*	*31.7 U*	*15.9 U*	*1 U*	*1 U*	*NS*
1,2,4-Trichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*4.8 U*	*4.8 U*	*NS*
1,2,4-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	**4.3**	**3.9**	*NS*
1,2-Dibromoethane (EDB)	ug/m^3	*NS*	*NS*	*NS*	*2 U*	*2 U*	*NS*
1,2-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*1.5 U*	*1.5 U*	*NS*
1,2-Dichloroethane	ug/m^3	*20.2 U*	*16.2 U*	*8.09 U*	*0.52 U*	*0.52 U*	*NS*
1,2-Dichloropropane	ug/m^3	*46.2 U*	*37.0 U*	*18.5 U*	*1.2 U*	*1.2 U*	*NS*
1,3,5-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	**23**	*1.3 U*	*NS*
1,3-Butadiene	ug/m^3	*NS*	*NS*	*NS*	*0.57 U*	*0.57 U*	*NS*
1,3-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*1.5 U*	*1.5 U*	*NS*
1,4-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*1.5 U*	*1.5 U*	*NS*
2-Butanone (MEK)	ug/m^3	*29.5 U*	*23.6 U*	*11.8 U*	*3.8 U*	*3.8 U*	*NS*
2-Hexanone	ug/m^3	*41.0 U*	*32.8 U*	*16.4 U*	*5.2 U*	*5.2 U*	*NS*
2-Propanol	ug/m^3	*NS*	*NS*	*NS*	*3.2 U*	**14.4**	*NS*
4-Ethyltoluene	ug/m^3	*NS*	*NS*	*NS*	**2.5**	*1.3 U*	*NS*
4-Methyl-2-pentanone (MIBK)	ug/m^3	*41.0 U*	*32.8 U*	*16.4 U*	*5.2 U*	*5.2 U*	*NS*
Acetone	ug/m^3	*2380 U*	*1900 U*	*950 U*	**25.7**	**85.3**	*NS*
Benzene	ug/m^3	**45,600**	**4,780**	**2,120**	**1,180**	**2,730**	*NS*
Benzyl chloride	ug/m^3	*NS*	*NS*	*NS*	*1.3 U*	*1.3 U*	*NS*
Bromodichloromethane	ug/m^3	*NS*	*NS*	*NS*	*1.7 U*	*1.7 U*	*NS*
Bromoform	ug/m^3	*103 U*	*82.7 U*	*41.3 U*	*2.6 U*	*2.6 U*	*NS*
Bromomethane	ug/m^3	*NS*	*NS*	*NS*	*1 U*	*1 U*	*NS*
Carbon disulfide	ug/m^3	*31.1 U*	*24.9 U*	*12.5 U*	**1.7**	*0.79 U*	*NS*
Carbon tetrachloride	ug/m^3	*31.5 U*	*25.2 U*	*12.6 U*	*0.81 U*	*0.81 U*	*NS*
Chlorobenzene	ug/m^3	*46.0 U*	*36.8 U*	*18.4 U*	*1.2 U*	*1.2 U*	*NS*
Chloroethane	ug/m^3	*26.4 U*	*21.1 U*	*10.6 U*	*0.68 U*	*0.68 U*	*NS*
Chloroform	ug/m^3	*24.4 U*	*19.5 U*	*9.77 U*	*0.62 U*	*0.62 U*	*NS*
Chloromethane	ug/m^3	*NS*	*NS*	*NS*	*0.53 U*	*0.53 U*	*NS*
cis-1,2-Dichloroethene	ug/m^3	*NS*	*NS*	*NS*	*1 U*	*1 U*	*NS*
cis-1,3-Dichloropropene	ug/m^3	*45.4 U*	*36.3 U*	*18.2 U*	*1.2 U*	*1.2 U*	*NS*
Cyclohexane	ug/m^3	*NS*	*NS*	*NS*	**20.5**	*0.88 U*	*NS*
Dibromochloromethane	ug/m^3	*NS*	*NS*	*NS*	*2.2 U*	*2.2 U*	*NS*
Dichlorodifluoromethane	ug/m^3	*NS*	*NS*	*NS*	**2**	**1.9**	*NS*
Dichlorotetrafluoroethane	ug/m^3	*NS*	*NS*	*NS*	*1.8 U*	*1.8 U*	*NS*
Ethanol	ug/m^3	*NS*	*NS*	*NS*	**3.1**	**33.5**	*NS*
Ethyl acetate	ug/m^3	*NS*	*NS*	*NS*	*0.92 U*	**13.2**	*NS*
Ethylbenzene	ug/m^3	**216**	*34.7 U*	*17.4 U*	**8.3**	**8.8**	*NS*
Hexachloro-1,3-butadiene	ug/m^3	*NS*	*NS*	*NS*	*2.7 U*	*2.7 U*	*NS*
m&p-Xylene	ug/m^3	**1,070**	**70.9**	*34.7 U*	**95.6**	**31.1**	*NS*
Methylene Chloride	ug/m^3	*194 U*	*155 U*	*77.7 U*	*4.4 U*	**351**	*NS*
Methyl-tert-butyl ether	ug/m^3	*NS*	*NS*	*NS*	*4.6 U*	*4.6 U*	*NS*
Naphthalene	ug/m^3	*NS*	*NS*	*NS*	**5.5**	*3.4 U*	*NS*
n-Heptane	ug/m^3	*NS*	*NS*	*NS*	**20.7**	**4.9**	*NS*
n-Hexane	ug/m^3	*NS*	*NS*	*NS*	**4.3**	*45.4 U*	*NS*
o-Xylene	ug/m^3	**430**	**58.7**	**18.6**	**35.6**	**17.8**	*NS*
Propylene	ug/m^3	*NS*	*NS*	*NS*	*0.44 U*	**11.1**	*NS*
Styrene	ug/m^3	*NS*	*NS*	*NS*	*1.1 U*	*1.1 U*	*NS*
Tetrachloroethene	ug/m^3	*33.9 U*	*27.1 U*	*13.6 U*	*0.87 U*	**1.6**	*NS*
Tetrahydrofuran	ug/m^3	*NS*	*NS*	*NS*	*0.76 U*	*0.76 U*	*NS*
Toluene	ug/m^3	**1,040**	*603 U*	*301 U*	**54.2**	**81.5**	*NS*
trans-1,2-Dichloroethene	ug/m^3	*39.6 U*	*31.7 U*	*15.9 U*	*1 U*	*1 U*	*NS*
trans-1,3-Dichloropropene	ug/m^3	*45.4 U*	*36.3 U*	*18.2 U*	*1.2 U*	*1.2 U*	*NS*
Trichloroethene	ug/m^3	*26.9 U*	*21.5 U*	*10.7 U*	*0.69 U*	*0.69 U*	*NS*
Trichlorofluoromethane	ug/m^3	*NS*	*NS*	*NS*	**3.9**	*1.4 U*	*NS*
Vinyl acetate	ug/m^3	*NS*	*NS*	*NS*	**2.1**	*2.3 U*	*NS*
Vinyl chloride	ug/m^3	*25.6 U*	*20.4 U*	*10.2 U*	*0.33 U*	*0.33 U*	*NS*
Total Volatile Organics	ug/m^3	**48,356**	**4,910**	**2,161**	**1,515**	**3,393**	*NS*

Notes:

BOLD = Analyte detected

ug/m^3 = micro grams per cubic meter

U = Non-detect

NS = Not Sampled

Table C1-3
Cell 1 Groundwater Analytical Results

Sample ID		CO02-PZM006			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*5 U*	*5 U*	*25 U*
1,2-Dibromoethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	**3.2 J**
1,2-Dichloropropane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
2-Butanone (MEK)	µg/L	*50 U*	*25 U*	*25 U*	**5 J**
2-Hexanone	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
Acetone	µg/L	**44.2 J**	**38 J**	**49.3 J**	**74.5**
Benzene	µg/L	**339,000**	**191,000**	**15,700**	**241,000**
Bromodichloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromoform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromomethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon disulfide	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon tetrachloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	**1.4 J**
Chloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Dibromochloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Ethylbenzene	µg/L	**367**	**225**	**271**	**335**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Methylene Chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Styrene	µg/L	**7.2**	**5.5**	**5.8**	**9.2**
Tetrachloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Toluene	µg/L	**122**	**136**	**43.5**	**104**
trans-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichlorofluoromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Vinyl chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	µg/L	**738**	**345**	**403**	**643**
Total Volatile Organics	µg/L	**340,278**	**191,750**	**16,473**	**242,175**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**360**	**210**	**276**	**370**

Notes:
Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The result for this analyte is a quantitative estimate
µg/L = Micrograms per liter

Table C1-3
Cell 1 Groundwater Analytical Results

Sample ID		CO18-PZM006			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*5 U*	*5 U*	*25 U*
1,2-Dibromoethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloropropane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
2-Butanone (MEK)	µg/L	*50 U*	*25 U*	*25 U*	**10.9 J**
2-Hexanone	µg/L	*50 U*	*25 U*	*25 U*	**1.8 J**
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
Acetone	µg/L	**40.7 J**	**78.4**	**136**	**92.3**
Benzene	µg/L	**669,000**	**365,000**	**454,000**	**293,000**
Bromodichloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromoform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromomethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon disulfide	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon tetrachloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Dibromochloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Ethylbenzene	µg/L	**98.8**	**51.1**	**86.8**	**43.2**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Methylene Chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Styrene	µg/L	*5 U*	**1.8 J**	**3.1 J**	**3.2 J**
Tetrachloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Toluene	µg/L	**36,500**	**20,400**	**28,500**	**1,940**
trans-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichlorofluoromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Vinyl chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	µg/L	**2,520**	**1,310**	**2,260**	**1,010**
Total Volatile Organics	µg/L	**708,160**	**386,841**	**484,986**	**296,101**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**262**	**117**	**211**	**159**

Notes:
Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The result for this analyte is a quantitative estimate
µg/L = Micrograms per liter

Table C1-3
Cell 1 Groundwater Analytical Results

Sample ID		CO93-PZM			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*5 U*	*5 U*	*25 U*
1,2-Dibromoethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloropropane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
2-Butanone (MEK)	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
2-Hexanone	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
Acetone	µg/L	*50 U*	**42 J**	**62.9**	**58.5**
Benzene	µg/L	**180,000**	**230,000**	**230,000**	**215,000**
Bromodichloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromoform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromomethane	µg/L	*5 U*	*5 U*	*5 U*	**3.5 J**
Carbon disulfide	µg/L	**18.1**	**15.1 L2**	**19.7**	**16.4**
Carbon tetrachloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chlorobenzene	µg/L	*5 U*	**10**	**12**	**12**
Chloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Dibromochloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Ethylbenzene	µg/L	**1,430**	**894**	**1,130**	**1,400**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Methylene Chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Styrene	µg/L	**1,600**	**945**	**1,200**	**1,430**
Tetrachloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Toluene	µg/L	**55,400**	**50,700**	**61,500**	**61,300**
trans-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichloroethene	µg/L	*5 U*	*5 U*	*5 U*	**1.7 J**
Trichlorofluoromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Vinyl chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	µg/L	**17,800**	**10,600**	**15,300**	**19,500**
Total Volatile Organics	µg/L	**256,248**	**293,191**	**309,225**	**298,722**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**1,970**	**1,480**	**3,750**	**10,000**

Notes:
Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The result for this analyte is a quantitative estimate
µg/L = Micrograms per liter

Table C2-1: Summary of Operation Conditions
Cell 2: AS/SVE System

Cell 2 2017 Estimated Hydrocarbon Recovery

Parameter	Units	Q1* 1/1 - 3/31	Q2 4/1 - 6/30	Q3 7/1 - 9/30	Q4 10/1 - 12/31	Total/Average 1/1 - 12/31
Flow Rate	SCFM	96	129	89	75	97.3
Average Concentrations	ug/m^3	3,026	9.68	14.7	50.4	3,101
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.0011	0.000005	0.000005	0.000014	0.00028
Total CATOX/VGAC Operating Time	hours	1,544	1,819	1,861	1,879	7,103
Overall CATOX/VGAC Operational Time	%	72.3%	84.2%	85.2%	85.1%	81.7%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	1.68	0.0085	0.0091	0.0266	1.724

*Converted from CATOX to VGAC mid-way through February

Cell 2 Cumulative Summary of Estimated Hydrocarbon Recovery

October 1, 2014 - December 31, 2017

Parameter	Units	Quantity
Total CATOX/VGAC Operating Time	hours	17,855
Overall CATOX/VGAC Operational Time	%	62.7%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	281.72
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.016

Table C2-2
Cell 2 Well Construction Information

Monitoring Well Designation	Monitoring Well Temporary Identification	Installation Method	Northing	Easting	Top of Casing Elevation	Protection Cover Type	Well Total Depth	Riser Length	Screen Length	Filter Pack Interval	Seal Interval	Grout Interval
CO27-PZM012	----------	Unknown	563239.965	1454916.917	5.12	Unknown	-----	-----	-----	-----	-----	-----
CO27-PZM046	----------	Unknown	563239.958	1454913.372	5.17	Unknown	-----	-----	-----	-----	-----	-----
CO36-PZM008	Cell 2 - MW1 (S)	Hollow Stem Auger	563212.310	1454571.760	6.94	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO36-PZM043	Cell 2 - MW8 (I)	Hollow Stem Auger	563214.490	1454578.370	6.92	Steel Riser	50.00	30.00	20.00	28-50	27-28	0-27
CO37-PZM038	Cell 2 - MW9 (I)	Hollow Stem Auger	563268.500	1455154.680	12.12	Steel Riser	50.00	30.00	20.00	28-50	27-28	0-27
CO38-PZM006	Cell 2 - MW3 (S)	Hollow Stem Auger	563078.800	1454743.790	6.75	Steel Riser	13.00	3.00	10.00	2-13	1-2	0-1
CO38-PZM043	Cell 2 - MW10 (I)	Hollow Stem Auger	563078.330	1454737.750	6.65	Steel Riser	50.00	30.00	20.00	28-50	27-28	0-27
CO39-PZM007	Cell 2 - MW4 (S)	Hollow Stem Auger	563141.660	1455095.700	7.75	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO39-PZM042	Cell 2 - MW11 (I)	Hollow Stem Auger	563140.070	1455089.800	7.91	Steel Riser	50.00	30.00	20.00	28-50	27-28	0-27
CO40-PZM008	Cell 2 - MW5 (S)	Hollow Stem Auger	563039.410	1455081.700	7.47	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO41-PZM001	Cell 2 - MW6 (S)	Hollow Stem Auger	562873.180	1454953.000	13.57	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO41-PZM036	Cell 2 - MW12 (I)	Hollow Stem Auger	562865.340	1454950.750	13.60	Steel Riser	50.00	30.00	20.00	28-50	27-28	0-27
CO42-PZM004	Cell 2 - MW7 (S)	Hollow Stem Auger	563177.720	1455458.510	10.83	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2

Table C2-3
Well Groundwater Elevations

Well ID	Temporary Well ID	Top of PVC Elevation (ft)	Aquifer	Well Depth from Ground Surface (ft)	3/20/2017-3/21/2017		6/14/2017-6/15/2017		10/17/2017		12/12/2017-12/14/2017	
					Depth to Groundwater	Groundwater Elevation (ft)	Depth to Groundwater	Groundwater Elevation (ft)	Depth to Groundwater	Groundwater Elevation (ft)	Depth to Groundwater	Groundwater Elevation (ft)
CO27-PZM012		5.12	S		4.77	0.35	4.6	0.52	4.94	0.18	4.94	0.18
CO27-PZM046		5.17	I		9.05	-3.88	7.92	-2.75	8.71	-3.54	8.09	-2.92
CO36-PZM008	Cell 2 - MW1 (S)	6.94	S	15.00	7.34	-0.40	6.8	0.14	7	-0.06	6.7	0.24
CO36-PZM043	Cell 2 - MW8 (I)	6.92	I	50.00	7.84	-0.92	7.4	-0.48	7.68	-0.76	7.25	-0.33
CO37-PZM038	Cell 2 - MW9 (I)	12.12	I	50.00	12.45	-0.33	12.3	-0.18	12.5	-0.38	12.48	-0.36
CO38-PZM006	Cell 2 - MW3 (S)	6.75	S	13.00	6.82	-0.07	6.4	0.35	6.43	0.32	6.33	0.42
CO38-PZM043	Cell 2 - MW10 (I)	6.65	I	50.00	7.67	-1.02	7.55	-0.9	7.43	-0.78	7.28	-0.63
CO39-PZM007	Cell 2 - MW4 (S)	7.75	S	15.00	5.94	1.81	7	0.75	6.71	1.04	7.2	0.55
CO39-PZM042	Cell 2 - MW11 (I)	7.91	I	50.00	8.29	-0.38	8.15	-0.24	8.43	-0.52	8.69	-0.78
CO40-PZM008	Cell 2 - MW5 (S)	7.47	S	15.00	7.15	0.32	7	0.47	6.32	1.15	7.33	0.14
CO41-PZM001	Cell 2 - MW6 (S)	13.57	S	15.00	12.98	0.59	12.61	0.96	12.52	1.05	12.99	0.58
CO41-PZM036	Cell 2 - MW12 (I)	13.60	I	50.00	13.83	-0.23	13.7	-0.1	13.83	-0.23	14.13	-0.53
CO42-PZM004	Cell 2 - MW7 (S)	10.83	S	15.00	3.95	6.88	8.47	2.36	8.4	2.43	8.73	2.1
CO43-PZM048	Extraction Well 1	0.00	I	48.00	NM	NM	NM	NM	2.77	-2.77	NM	NM
CO44-PZM048	Extraction Well 2	0.00	I	48.00	NM	NM	NM	NM	3.9	-3.90	NM	NM
CO45-PZM047	Extraction Well 3	0.00	I	47.00	NM	NM	NM	NM	5.86	-5.86	NM	NM
CO46-PZM047	Extraction Well 4	0.00	I	47.00	NM	NM	NM	NM	17.15	-17.15	NM	NM
CO47-PZM046	Extraction Well 5	0.00	I	46.00	NM	NM	NM	NM	6.78	-6.78	NM	NM
CO48-PZM044	Extraction Well 6	0.00	I	44.00	NM	NM	NM	NM	5.8	-5.80	NM	NM

Notes:

I = Intermediate depth wells
S = Water table well
NM = Not Measured

Table C2-4: Summary of Operation
Cell 2: Groundwater Pump Treat System

Parameter	Units	Q1 1/1 - 3/31	Q2 4/1 - 6/30	Q3 7/1 - 9/30	Q4 10/1 - 12/31	Total 1/1 - 12/31
Total Discharge	gallons	1,580,887	611,746	881,744	939,064	4,013,441
Influence Total Concentrations	lbs/gal	0.0011	0.0022	0.0023	0.0018	0.0074
Effluence Total Concentrations	lbs/gal	0.0000042	0.0000034	0.0000072	0.0000051	0.000020
Influence Hydrocarbons	lbs	1,763	1,356	2,017	1,692	6,828
Effluence Hydrocarbons	lbs	6.68	2.07	6.31	4.76	19.8
Total Hydrocarbons Removed	lbs	1,756	1,354	2,010	1,688	6,808

Table C2-5 - CATOX/VGAC Influent Analytical Results
Cell 2: AS/SVE System

Month		January	February*	March	April	May	June
Analyte (TO-15 Organics)	**Units**						
1,1,1-Trichloroethane	ug/m^3	*2.18 U*	*1.09 U*	*1.09 U*	*1.09 U*	*1.09 U*	*NS*
1,1,2,2-Tetrachloroethane	ug/m^3	*2.75 U*	*1.37 U*	*1.37 U*	*1.37 U*	*1.37 U*	*NS*
1,1,2-Trichloroethane	ug/m^3	*1.09 U*	*0.55 U*	*0.55 U*	*0.55 U*	*0.55 U*	*NS*
1,1,2-Trichlorotrifluoroethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,1-Dichloroethane	ug/m^3	*1.62 U*	*0.81 U*	*0.81 U*	*0.81 U*	*0.81 U*	*NS*
1,1-Dichloroethene	ug/m^3	*1.59 U*	*0.79 U*	*0.79 U*	*0.79 U*	*0.79 U*	*NS*
1,2,4-Trichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2,4-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2-Dibromoethane (EDB)	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2-Dichloroethane	ug/m^3	*0.81 U*	*0.40 U*	*0.40 U*	*0.4 U*	*0.4 U*	*NS*
1,2-Dichloroethene (trans)	ug/m^3	*1.59 U*	*0.79 U*	*0.79 U*	*0.79 U*	*0.79 U*	*NS*
1,2-Dichloropropane	ug/m^3	*1.85 U*	*0.92 U*	*0.92 U*	*0.92 U*	*0.92 U*	*NS*
1,3,5-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,3-Butadiene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,3-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,3-Dichloropropene (cis)	ug/m^3	*1.82 U*	*0.91 U*	*0.91 U*	*0.91 U*	*0.91 U*	*NS*
1,3-Dichloropropene (trans)	ug/m^3	*1.82 U*	*0.91 U*	*0.91 U*	*0.91 U*	*0.91 U*	*NS*
1,4-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
2-Propanol	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
4-Ethyltoluene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Acetone	ug/m^3	*95.0 U*	*47.5 U*	*47.5 U*	*47.5 U*	*47.5 U*	*NS*
Benzene	ug/m^3	**2,940**	**351**	*0.32 U*	**6.95**	**12.4**	*NS*
Benzyl chloride	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Bromodichloromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Bromoform	ug/m^3	*4.13 U*	*2.07 U*	*2.07 U*	*2.07 U*	*2.07 U*	*NS*
Bromomethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Carbon disulfide	ug/m^3	*1.25 U*	**0.63**	*0.62 U*	*0.62 U*	*0.62 U*	*NS*
Carbon tetrachloride	ug/m^3	*1.26 U*	*0.63 U*	*0.63 U*	*0.63 U*	*0.63 U*	*NS*
Chlorobenzene	ug/m^3	*1.84 U*	*0.92 U*	*0.92 U*	*0.92 U*	*0.92 U*	*NS*
Chloroethane	ug/m^3	*1.06 U*	*0.53 U*	*0.53 U*	*0.53 U*	*0.53 U*	*NS*
Chloroform	ug/m^3	*0.98 U*	*0.49 U*	*0.49 U*	*0.49 U*	*0.49 U*	*NS*
Chloromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
cis-1,2-Dichloroethene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Cyclohexane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Dibromochloromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Dichlorodifluoromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Dichlorotetrafluoroethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Ethanol	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Ethyl acetate	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Ethylbenzene	ug/m^3	**87.5**	**15.5**	*0.87 U*	*0.87 U*	*0.87 U*	*NS*
Hexachloro-1,3-butadiene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Methyl butyl ketone	ug/m^3	*1.64 U*	*0.82 U*	*0.82 U*	*0.82 U*	*0.82 U*	*NS*
Methyl ethyl ketone	ug/m^3	*1.18 U*	**0.76**	*0.59 U*	*0.59 U*	*0.59 U*	*NS*
Methyl isobutyl ketone	ug/m^3	*1.64 U*	*0.82 U*	*0.82 U*	*0.82 U*	*0.82 U*	*NS*
Methylene chloride	ug/m^3	*7.77 U*	*3.88 U*	*3.88 U*	*3.88 U*	*3.88 U*	*NS*
Methyl-tert-butyl ether	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Naphthalene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
n-Heptane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
n-Hexane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Propylene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Styrene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Tetrachloroethene	ug/m^3	*1.36 U*	*0.68 U*	*0.68 U*	*0.68 U*	*0.68 U*	*NS*
Tetrahydrofuran	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Toluene	ug/m^3	**1,660**	**287**	*15.1 U*	*15.1 U*	*15.1 U*	*NS*
Trichloroethene	ug/m^3	*1.07 U*	*0.54 U*	*0.54 U*	*0.54 U*	*0.54 U*	*NS*
Trichlorofluoromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Vinyl acetate	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Vinyl chloride	ug/m^3	*1.02 U*	*0.51 U*	*0.51 U*	*0.51 U*	*0.51 U*	*NS*
Xylenes (m&p)	ug/m^3	**379**	**94.9**	*1.74 U*	*1.74 U*	*1.74 U*	*NS*
Xylenes (o)	ug/m^3	**187**	**48.5**	*0.87 U*	*0.87 U*	*0.87 U*	*NS*
Total Volatile Organics	ug/m^3	**5,254**	**798**	*ND*	**6.95**	**12.4**	*NS*

Notes:

BOLD = Analyte detected

ug/m^3 = micro grams per cubic meter

U = Non-detect

NS = Not Sampled

*Converted from CATOX to VGAC mid-way through the month

Table C2-5 - CATOX/VGAC Influent Analytical Results
Cell 2: AS/SVE System

Month		July	August	September	October	November	December
Analyte (TO-15 Organics)	**Units**						
1,1,1-Trichloroethane	ug/m^3	*1.09 U*	*1.09 U*	*1.09 U*	*1.5 U*	*1.4 U*	*NS*
1,1,2,2-Tetrachloroethane	ug/m^3	*1.37 U*	*1.37 U*	*1.37 U*	*0.94 U*	*0.88 U*	*NS*
1,1,2-Trichloroethane	ug/m^3	*0.55 U*	*0.55 U*	*0.55 U*	*0.74 U*	*0.69 U*	*NS*
1,1,2-Trichlorotrifluoroethane	ug/m^3	*NS*	*NS*	*NS*	*2.1 U*	*2.0 U*	*NS*
1,1-Dichloroethane	ug/m^3	*0.81 U*	*0.81 U*	*0.81 U*	*1.1 U*	*1.0 U*	*NS*
1,1-Dichloroethene	ug/m^3	*0.79 U*	*0.79 U*	*0.79 U*	*1.1 U*	*1.0 U*	*NS*
1,2,4-Trichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*5.1 U*	*4.8 U*	*NS*
1,2,4-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	**2.5**	*1.3 U*	*NS*
1,2-Dibromoethane (EDB)	ug/m^3	*NS*	*NS*	*NS*	*2.1 U*	*2.0 U*	*NS*
1,2-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*1.6 U*	*1.5 U*	*NS*
1,2-Dichloroethane	ug/m^3	*0.40 U*	*0.40 U*	*0.40 U*	*0.55 U*	*0.52 U*	*NS*
1,2-Dichloroethene (trans)	ug/m^3	*0.79 U*	*0.79 U*	*0.79 U*	*1.1 U*	*1.0 U*	*NS*
1,2-Dichloropropane	ug/m^3	*0.92 U*	*0.92 U*	*0.92 U*	*1.3 U*	*1.2 U*	*NS*
1,3,5-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	*1.3 U*	*1.3 U*	*NS*
1,3-Butadiene	ug/m^3	*NS*	*NS*	*NS*	*0.6 U*	*0.57 U*	*NS*
1,3-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*1.6 U*	*1.5 U*	*NS*
1,3-Dichloropropene (cis)	ug/m^3	*0.91 U*	*0.91 U*	*0.91 U*	*1.2 U*	*1.2 U*	*NS*
1,3-Dichloropropene (trans)	ug/m^3	*0.91 U*	*0.91 U*	*0.91 U*	*1.2 U*	*1.2 U*	*NS*
1,4-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*1.6 U*	*1.5 U*	*NS*
2-Propanol	ug/m^3	*NS*	*NS*	*NS*	*3.4 U*	**4.4**	*NS*
4-Ethyltoluene	ug/m^3	*NS*	*NS*	*NS*	*1.3 U*	*1.3 U*	*NS*
Acetone	ug/m^3	*47.5 U*	*47.5 U*	*47.5 U*	**23.7**	**18.9**	*NS*
Benzene	ug/m^3	**21.6**	**1.09**	**16.3**	**10.3**	**4.1**	*NS*
Benzyl chloride	ug/m^3	*NS*	*NS*	*NS*	*1.4 U*	*1.3 U*	*NS*
Bromodichloromethane	ug/m^3	*NS*	*NS*	*NS*	*1.8 U*	*1.7 U*	*NS*
Bromoform	ug/m^3	*2.07 U*	*2.07 U*	*2.07 U*	*2.8 U*	*2.6 U*	*NS*
Bromomethane	ug/m^3	*NS*	*NS*	*NS*	*1.1 U*	*1.0 U*	*NS*
Carbon disulfide	ug/m^3	*0.62 U*	*0.62 U*	*0.62 U*	**2.4**	*0.79 U*	*NS*
Carbon tetrachloride	ug/m^3	*0.63 U*	*0.63 U*	*0.63 U*	*0.86 U*	*0.81 U*	*NS*
Chlorobenzene	ug/m^3	*0.92 U*	*0.92 U*	*0.92 U*	*1.3 U*	*1.2 U*	*NS*
Chloroethane	ug/m^3	*0.53 U*	*0.53 U*	*0.53 U*	*0.72 U*	*0.68 U*	*NS*
Chloroform	ug/m^3	*0.49 U*	*0.49 U*	*0.49 U*	*0.66 U*	*0.62 U*	*NS*
Chloromethane	ug/m^3	*NS*	*NS*	*NS*	**0.71**	*0.53 U*	*NS*
cis-1,2-Dichloroethene	ug/m^3	*NS*	*NS*	*NS*	*1.1 U*	*1.0 U*	*NS*
Cyclohexane	ug/m^3	*NS*	*NS*	*NS*	*0.94 U*	*0.88 U*	*NS*
Dibromochloromethane	ug/m^3	*NS*	*NS*	*NS*	*2.3 U*	*2.2 U*	*NS*
Dichlorodifluoromethane	ug/m^3	*NS*	*NS*	*NS*	*1.4 U*	*1.3 U*	*NS*
Dichlorotetrafluoroethane	ug/m^3	*NS*	*NS*	*NS*	*1.9 U*	*1.8 U*	*NS*
Ethanol	ug/m^3	*NS*	*NS*	*NS*	**7.1**	**6.6**	*NS*
Ethyl acetate	ug/m^3	*NS*	*NS*	*NS*	*0.98 U*	*0.92 U*	*NS*
Ethylbenzene	ug/m^3	*0.87 U*	*0.87 U*	*0.87 U*	*1.2 U*	*1.1 U*	*NS*
Hexachloro-1,3-butadiene	ug/m^3	*NS*	*NS*	*NS*	*2.9 U*	*2.7 U*	*NS*
Methyl butyl ketone	ug/m^3	*0.82 U*	*0.82 U*	*0.82 U*	*5.6 U*	*5.2 U*	*NS*
Methyl ethyl ketone	ug/m^3	**1.26**	*0.59 U*	**1.64**	*4 U*	*3.8 U*	*NS*
Methyl isobutyl ketone	ug/m^3	*0.82 U*	*0.82 U*	*0.82 U*	*5.6 U*	*5.2 U*	*NS*
Methylene chloride	ug/m^3	*3.88 U*	*3.88 U*	*3.88 U*	*4.7 U*	*4.4 U*	*NS*
Methyl-tert-butyl ether	ug/m^3	*NS*	*NS*	*NS*	*4.9 U*	*4.6 U*	*NS*
Naphthalene	ug/m^3	*NS*	*NS*	*NS*	**5.2**	*3.4 U*	*NS*
n-Heptane	ug/m^3	*NS*	*NS*	*NS*	*1.1 U*	*1.0 U*	*NS*
n-Hexane	ug/m^3	*NS*	*NS*	*NS*	*0.96 U*	*0.91 U*	*NS*
Propylene	ug/m^3	*NS*	*NS*	*NS*	*0.47 U*	*0.44 U*	*NS*
Styrene	ug/m^3	*NS*	*NS*	*NS*	*1.2 U*	*1.1 U*	*NS*
Tetrachloroethene	ug/m^3	*0.68 U*	*0.68 U*	*0.68 U*	*0.92 U*	*0.87 U*	*NS*
Tetrahydrofuran	ug/m^3	*NS*	*NS*	*NS*	*0.8 U*	*0.76 U*	*NS*
Toluene	ug/m^3	*15.1 U*	*15.1 U*	*15.1 U*	**4.6**	**3.7**	*NS*
Trichloroethene	ug/m^3	*0.54 U*	*0.54 U*	*0.54 U*	*0.74 U*	*0.69 U*	*NS*
Trichlorofluoromethane	ug/m^3	*NS*	*NS*	*NS*	*1.5 U*	*1.4 U*	*NS*
Vinyl acetate	ug/m^3	*NS*	*NS*	*NS*	**1.3**	*2.3 U*	*NS*
Vinyl chloride	ug/m^3	*0.51 U*	*0.51 U*	*0.51 U*	*0.35 U*	*0.33 U*	*NS*
Xylenes (m&p)	ug/m^3	**2.2**	*1.74 U*	*1.74 U*	**3.9**	*2.2 U*	*NS*
Xylenes (o)	ug/m^3	*0.87 U*	*0.87 U*	*0.87 U*	**1.4**	*1.1 U*	*NS*
Total Volatile Organics	ug/m^3	**25.1**	**1.09**	**17.9**	**63.1**	**37.7**	*NS*

Notes:

BOLD = Analyte detected

ug/m^3 = micro grams per cubic meter

U = Non-detect

NS = Not Sampled

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO27-PZM012			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*25 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	*5 U*	**3.5 J**
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*50 U*
Acetone	µg/L	*10 U*	**17.8**	**44.3**	**45.5 J**
Benzene	µg/L	**16,100**	**13,400**	**9,540**	**10,900**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Bromomethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Chlorobenzene	µg/L	*1 U*	*1 U*	**0.25 J**	*5 U*
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Chloromethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Ethylbenzene	µg/L	**171**	**117**	**130**	**120**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Styrene	µg/L	**213**	**135**	**134**	**136**
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Toluene	µg/L	**5,390**	**4,210**	**3,040**	**3,900**
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Xylenes	µg/L	**1,500**	**1,010**	**1,060**	**1,060**
Total Volatile Organics	µg/L	**23,374**	**18,890**	**13,949**	**16,165**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**5,670**	**1,910**	**1,280**	**863**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting limit

J = The positive result reported for this analyte is a quantitative estimate

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO27-PZM046			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*5 U*	*5 U*	*25 U*
1,2-Dibromoethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloropropane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
2-Butanone (MEK)	µg/L	*50 U*	*25 U*	*25 U*	**9 J**
2-Hexanone	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
Acetone	µg/L	*50 U*	**55.9**	**60**	**69.1**
Benzene	µg/L	**55,600**	**240,000**	**212,000**	**117,000**
Bromodichloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromoform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromomethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon disulfide	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon tetrachloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chlorobenzene	µg/L	*5 U*	**2.2 J**	**1.9 J**	**1.3 J**
Chloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Dibromochloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Ethylbenzene	µg/L	**35.4**	**474**	**505**	**375**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Methylene Chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Styrene	µg/L	**7.8**	**72.8**	**88.4**	**44.7**
Tetrachloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Toluene	µg/L	**6,920**	**34,800**	**30,300**	**16,900**
trans-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichlorofluoromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Vinyl chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	µg/L	**617**	**9,100**	**7,850**	**4,330**
Total Volatile Organics	µg/L	**63,180**	**284,505**	**250,805**	**138,729**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**1,170**	**5,200**	**19,700**	**6,970**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO36-PZM008			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1-Dichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	µg/L	25 U	5 U	5 U	25 U
1,2-Dibromoethane	µg/L	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U
1,2-Dichloroethane	µg/L	5 U	5 U	5 U	5 U
1,2-Dichloropropane	µg/L	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U
2-Butanone (MEK)	µg/L	50 U	25 U	25 U	50 U
2-Hexanone	µg/L	50 U	25 U	25 U	50 U
4-Methyl-2-pentanone (MIBK)	µg/L	50 U	25 U	25 U	50 U
Acetone	µg/L	50 U	25 U	**57.9**	**61.1**
Benzene	µg/L	**21,300**	**13,100**	**16,400**	**9,510**
Bromodichloromethane	µg/L	5 U	5 U	5 U	5 U
Bromoform	µg/L	5 U	5 U	5 U	5 U
Bromomethane	µg/L	5 U	5 U	5 U	5 U
Carbon disulfide	µg/L	5 U	5 U	5 U	5 U
Carbon tetrachloride	µg/L	5 U	5 U	5 U	5 U
Chlorobenzene	µg/L	5 U	5 U	5 U	5 U
Chloroethane	µg/L	5 U	5 U	5 U	5 U
Chloroform	µg/L	5 U	5 U	5 U	5 U
Chloromethane	µg/L	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U
Dibromochloromethane	µg/L	5 U	5 U	5 U	5 U
Ethylbenzene	µg/L	**54.3**	**58.3**	**59.8**	**21.4**
Methyl tert-butyl ether (MTBE)	µg/L	5 U	5 U	5 U	5 U
Methylene Chloride	µg/L	5 U	5 U	5 U	5 U
Styrene	µg/L	**15.4**	**16.1**	**16.9**	**5.7**
Tetrachloroethene	µg/L	5 U	5 U	5 U	5 U
Toluene	µg/L	**4,610**	**3,270**	**3,490**	**1,540**
trans-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U
Trichloroethene	µg/L	5 U	5 U	5 U	5 U
Trichlorofluoromethane	µg/L	5 U	5 U	5 U	5 U
Vinyl chloride	µg/L	5 U	5 U	5 U	5 U
Xylenes	µg/L	**1,370**	**1,150**	**1,040**	**631**
Total Volatile Organics	µg/L	**27,350**	**17,594**	**21,065**	**11,769**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**723**	**440**	**435**	**283**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO36-PZM043			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*5 U*	*5 U*	*25 U*
1,2-Dibromoethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloropropane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
2-Butanone (MEK)	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
2-Hexanone	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
Acetone	µg/L	*50 U*	*25 U*	**93.7**	**45.9 J**
Benzene	µg/L	**15,400**	**17,100**	**31,500**	**30,400**
Bromodichloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromoform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromomethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon disulfide	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon tetrachloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Dibromochloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Ethylbenzene	µg/L	**101**	**31.9**	**43.4**	**42.9**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Methylene Chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Styrene	µg/L	**95.6**	**7.6**	**9.1**	**7.5**
Tetrachloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Toluene	µg/L	**1,690**	**2,270**	**3,430**	**3,400**
trans-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichlorofluoromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Vinyl chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	µg/L	**836**	**553**	**704**	**675**
Total Volatile Organics	µg/L	**18,123**	**19,963**	**35,780**	**34,571**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**7,980**	**538**	**742**	**812**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO37-PZM038			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	5 U	5 U	1 U	1 U
1,1,1-Trichloroethane	µg/L	5 U	5 U	1 U	1 U
1,1,2,2-Tetrachloroethane	µg/L	5 U	5 U	1 U	1 U
1,1,2-Trichloroethane	µg/L	5 U	5 U	1 U	1 U
1,1-Dichloroethane	µg/L	5 U	5 U	1 U	1 U
1,1-Dichloroethene	µg/L	5 U	5 U	1 U	1 U
1,2-Dibromo-3-chloropropane	µg/L	25 U	5 U	1 U	5 U
1,2-Dibromoethane	µg/L	5 U	5 U	1 U	1 U
1,2-Dichlorobenzene	µg/L	5 U	5 U	1 U	1 U
1,2-Dichloroethane	µg/L	5 U	5 U	1 U	1 U
1,2-Dichloropropane	µg/L	5 U	5 U	1 U	1 U
1,4-Dichlorobenzene	µg/L	5 U	5 U	1 U	1 U
2-Butanone (MEK)	µg/L	50 U	25 U	5 U	10 U
2-Hexanone	µg/L	50 U	25 U	5 U	10 U
4-Methyl-2-pentanone (MIBK)	µg/L	50 U	25 U	5 U	10 U
Acetone	µg/L	**32 J**	**41.9 J**	**28.4**	**3.2 J**
Benzene	µg/L	**69,400**	**27**	**7,830**	**9,170**
Bromodichloromethane	µg/L	5 U	5 U	1 U	1 U
Bromoform	µg/L	5 U	5 U	1 U	1 U
Bromomethane	µg/L	5 U	5 U	1 U	1 U
Carbon disulfide	µg/L	5 U	5 U	1 U	1 U
Carbon tetrachloride	µg/L	5 U	5 U	1 U	1 U
Chlorobenzene	µg/L	5 U	5 U	**0.44 J**	**0.52 J**
Chloroethane	µg/L	5 U	5 U	1 U	1 U
Chloroform	µg/L	5 U	5 U	1 U	1 U
Chloromethane	µg/L	5 U	5 U	1 U	1 U
cis-1,2-Dichloroethene	µg/L	5 U	5 U	1 U	**0.28 J**
cis-1,3-Dichloropropene	µg/L	5 U	5 U	1 U	1 U
Dibromochloromethane	µg/L	5 U	5 U	1 U	1 U
Ethylbenzene	µg/L	**244**	5 U	**238**	**270**
Methyl tert-butyl ether (MTBE)	µg/L	5 U	5 U	1 U	**0.2 J**
Methylene Chloride	µg/L	5 U	5 U	1 U	1 U
Styrene	µg/L	**12.2**	5 U	**315**	**338**
Tetrachloroethene	µg/L	5 U	5 U	1 U	1 U
Toluene	µg/L	**6,180**	**5.9**	**5,960**	**6,980**
trans-1,2-Dichloroethene	µg/L	5 U	5 U	1 U	1 U
trans-1,3-Dichloropropene	µg/L	5 U	5 U	1 U	1 U
Trichloroethene	µg/L	5 U	5 U	1 U	**0.53 J**
Trichlorofluoromethane	µg/L	5 U	5 U	1 U	1 U
Vinyl chloride	µg/L	5 U	5 U	1 U	1 U
Xylenes	µg/L	**2,230**	5 U	**1,720**	**2,080**
Total Volatile Organics	µg/L	**78,098**	**74.8**	**16,092**	**18,843**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**1,280**	**14.1**	**1,550**	**1,370**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO38-PZM006			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*25 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	*5 U*	**2.6 J**
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*50 U*
Acetone	µg/L	*10 U*	**12.2**	**35.5**	**54.7**
Benzene	µg/L	**10,700**	**7,130**	**6,090**	**5,690**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Bromomethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Chlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Chloromethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Ethylbenzene	µg/L	**269**	**76**	**94.9**	**72.2**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Styrene	µg/L	**340**	**48.8**	**51.9**	**42.5**
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Toluene	µg/L	**7,210**	**1,330**	**1,350**	**970**
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*5 U*
Xylenes	µg/L	**2,120**	**557**	**698**	**549**
Total Volatile Organics	µg/L	**20,639**	**9,154**	**8,320**	**7,381**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**6,620**	**1,730**	**2,070**	**1,190**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO38-PZM043			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	*10 U*	**6.9 J**	**55.4**	**3.1 J**
Benzene	µg/L	**1.4**	**7,280**	**7.2**	**1.2**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromomethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	**0.37 J**
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	*1 U*	**219**	*1 U*	**0.23 J**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	**0.35 J**
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	*1 U*	**280**	*1 U*	*1 U*
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	*1 U*	**4,810**	**0.71 J**	*1 U*
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	*3 U*	**1,370**	*1 U*	**1.2 J**
Total Volatile Organics	µg/L	**1.40**	**13,966**	**63.3**	**6.45**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	*2 U*	**1,260**	**3.2**	**1.1 J**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO39-PZM007			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	*10 U*	**7.4 J**	**27.9**	*10 U*
Benzene	µg/L	**386**	**1,490**	**972**	**1,970**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromomethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	**0.57 J**
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	**2.8**	**7.1**	**8.4**	**13.8**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	**1.5**	**6.9**	**7.7**	**12.4**
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	**37.2**	**296**	**213**	**393**
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	**15.9**	**60.1**	**56.1**	**98.3**
Total Volatile Organics	µg/L	**443**	**1,868**	**1,285**	**2,488**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**676**	**841**	**918**	**643**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO39-PZM042			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1-Dichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	µg/L	25 U	5 U	5 U	25 U
1,2-Dibromoethane	µg/L	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U
1,2-Dichloroethane	µg/L	5 U	5 U	5 U	5 U
1,2-Dichloropropane	µg/L	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U
2-Butanone (MEK)	µg/L	50 U	25 U	25 U	**3.9 J**
2-Hexanone	µg/L	50 U	25 U	25 U	50 U
4-Methyl-2-pentanone (MIBK)	µg/L	50 U	25 U	25 U	50 U
Acetone	µg/L	50 U	**32.5 J**	**57.9**	**42.5 J**
Benzene	µg/L	**5,720**	**14,300**	**20,900**	**14,500**
Bromodichloromethane	µg/L	5 U	5 U	5 U	5 U
Bromoform	µg/L	5 U	5 U	5 U	5 U
Bromomethane	µg/L	5 U	5 U	5 U	5 U
Carbon disulfide	µg/L	5 U	5 U	5 U	5 U
Carbon tetrachloride	µg/L	5 U	5 U	5 U	5 U
Chlorobenzene	µg/L	5 U	5 U	5 U	5 U
Chloroethane	µg/L	5 U	5 U	5 U	5 U
Chloroform	µg/L	5 U	5 U	5 U	5 U
Chloromethane	µg/L	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U
Dibromochloromethane	µg/L	5 U	5 U	5 U	5 U
Ethylbenzene	µg/L	**63.3**	**111**	**223**	**140**
Methyl tert-butyl ether (MTBE)	µg/L	5 U	5 U	5 U	5 U
Methylene Chloride	µg/L	5 U	5 U	5 U	5 U
Styrene	µg/L	**97.9**	**170**	**338**	**203**
Tetrachloroethene	µg/L	5 U	5 U	5 U	5 U
Toluene	µg/L	**2,220**	**4,480**	**8,150**	**5,720**
trans-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U
Trichloroethene	µg/L	5 U	5 U	5 U	5 U
Trichlorofluoromethane	µg/L	5 U	5 U	5 U	5 U
Vinyl chloride	µg/L	5 U	5 U	5 U	5 U
Xylenes	µg/L	**554**	**911**	**1,740**	**1,180**
Total Volatile Organics	µg/L	**8,655**	**20,005**	**31,409**	**21,789**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**1,050**	**1,320**	**1,540**	**1,470**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO40-PZM008			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*50 U*	*5 U*	*5 U*	*10 U*
2-Hexanone	µg/L	*50 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	**64**	*5 U*	**42.6**	*10 U*
Benzene	µg/L	**302**	**21.6**	**551**	**58.2**
Bromodichloromethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Bromomethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Chloroethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Chloromethane	µg/L	*5 U*	*1 U*	**0.96 J**	*1 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
cis-1,3-Dichloropropene	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	**4.4 J**	**0.31 J**	**7.6**	**0.68 J**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	**4.1 J**	*1 U*	**5.5**	*1 U*
Tetrachloroethene	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	**89.2**	**1.2**	**82.9**	**5.2**
trans-1,2-Dichloroethene	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Trichlorofluoromethane	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*5 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	**48.4**	**3.5**	**47.4**	**9.4**
Total Volatile Organics	µg/L	**512**	**26.6**	**738**	**73.5**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**287**	**8**	**354**	**32.6**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO41-PZM001			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
1,1-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
1,1-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*5 U*	*5 U*	*5 U*
1,2-Dibromoethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
1,2-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
1,2-Dichloropropane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
2-Butanone (MEK)	µg/L	*50 U*	*25 U*	*25 U*	**9.9 J**
2-Hexanone	µg/L	*50 U*	*25 U*	*25 U*	**0.73 J**
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*25 U*	*25 U*	*10 U*
Acetone	µg/L	**22.7 J**	*25 U*	**91.8**	**7.6 J**
Benzene	µg/L	**20,500**	**1,220**	**1,960**	**17,800**
Bromodichloromethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Bromoform	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Bromomethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Carbon disulfide	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Carbon tetrachloride	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Chlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	**0.95 J**
Chloroethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Chloroform	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Chloromethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
cis-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Dibromochloromethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Ethylbenzene	µg/L	**314**	**23.2**	**59.5**	**392**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Methylene Chloride	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Styrene	µg/L	**10.8**	**1.1 J**	**1.2 J**	**3.8**
Tetrachloroethene	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Toluene	µg/L	**12,700**	**801**	**1,490**	**11,900**
trans-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Trichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Trichlorofluoromethane	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Vinyl chloride	µg/L	*5 U*	*5 U*	*5 U*	*1 U*
Xylenes	µg/L	**3,420**	**238**	**569**	**4,010**
Total Volatile Organics	µg/L	**36,968**	**2,283**	**4,172**	**34,125**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**280**	**18.9**	**45.7**	**271**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO41-PZM036			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1-Dichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	µg/L	25 U	5 U	5 U	25 U
1,2-Dibromoethane	µg/L	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U
1,2-Dichloroethane	µg/L	5 U	5 U	5 U	5 U
1,2-Dichloropropane	µg/L	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	µg/L	5 U	5 U	5 U	5 U
2-Butanone (MEK)	µg/L	50 U	25 U	25 U	50 U
2-Hexanone	µg/L	50 U	25 U	25 U	50 U
4-Methyl-2-pentanone (MIBK)	µg/L	50 U	25 U	25 U	50 U
Acetone	µg/L	**45.8 J**	25 U	**66.6**	**37.1 J**
Benzene	µg/L	**102,000**	**47,100**	**113,000**	**139,000**
Bromodichloromethane	µg/L	5 U	5 U	5 U	5 U
Bromoform	µg/L	5 U	5 U	5 U	5 U
Bromomethane	µg/L	5 U	5 U	5 U	5 U
Carbon disulfide	µg/L	**3.3 J**	5 U	5 U	5 U
Carbon tetrachloride	µg/L	5 U	5 U	5 U	5 U
Chlorobenzene	µg/L	5 U	**1.8 J**	**1.7 J**	**2 J**
Chloroethane	µg/L	5 U	5 U	5 U	5 U
Chloroform	µg/L	5 U	5 U	5 U	5 U
Chloromethane	µg/L	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U
Dibromochloromethane	µg/L	5 U	5 U	5 U	5 U
Ethylbenzene	µg/L	**858**	**605**	**592**	**621**
Methyl tert-butyl ether (MTBE)	µg/L	5 U	5 U	5 U	5 U
Methylene Chloride	µg/L	5 U	5 U	5 U	5 U
Styrene	µg/L	**420**	**263**	**264**	**287**
Tetrachloroethene	µg/L	5 U	5 U	5 U	5 U
Toluene	µg/L	**57,900**	**21,600**	**31,700**	**42,500**
trans-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U
Trichloroethene	µg/L	5 U	5 U	5 U	5 U
Trichlorofluoromethane	µg/L	5 U	5 U	5 U	5 U
Vinyl chloride	µg/L	5 U	5 U	5 U	5 U
Xylenes	µg/L	**25,600**	**9,420**	**10,200**	**12,600**
Total Volatile Organics	µg/L	**186,827**	**78,990**	**155,824**	**195,047**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**322**	**239**	**234**	**306**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C2-6
Cell 2 Groundwater Analytical Results

Sample ID		CO42-PZM004			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compound	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	*5 U*	**1 J**
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	*10 U*	**25**	**48.6**	*10 U*
Benzene	µg/L	*1 U*	**738**	**1,220**	**215**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	**0.21 J**
Bromomethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloromethane	µg/L	*1 U*	*1 U*	**1.4**	*1 U*
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	*1 U*	**50.3**	**52.4**	**23.2**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	*1 U*	**47.6**	**49.6**	**21.6**
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	*1 U*	**1,010**	**1,930**	**398**
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	*3 U*	**562**	**464**	**356**
Total Volatile Organics	µg/L	**0.00**	**2,433**	**3,766**	**1,015**

Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**6.1**	**188**	**155**	**93.8**

Notes:

Bold = Analyte Detected

U = Analyte not detected above laboratory reporting lin

J = The positive result reported for this analyte is a qua

µg/L = Micrograms per liter

Table C3-1: Summary of Operation Conditions
Cell 3: AS/SVE System in Cove Area

Cell 3 2017 Estimated Hydrocarbon Recovery

Parameter	Units	Q1 1/1 - 3/31	Q2 4/1 - 6/30	Q3 7/1 - 9/30	Q4 10/1 - 12/31	Total/Average 1/1 - 12/31
Flow Rate*	SCFM	140	140	140	140	140
Average Concentrations	ug/m^3	22,529	16,317	15,693	37,733	92,272
Estimated Hydrocarbon Removal Rate	pounds/hour	0.0118	0.0086	0.0082	0.0198	0.012
Total VGAC Operating Time	hours	964	1,817	1,882	1,841	6,504
Overall VGAC Operational Time	%	45.1%	84.1%	86.2%	83.4%	74.7%
Estimated Total Hydrocarbons Removed	pounds	11.387	15.546	15.486	36.424	78.8

*assumption due to lack of field measurements

Cell 3 Cumulative Summary of Estimated Hydrocarbon Recovery

August 3, 2010 - December 31, 2017

Parameter	Units	Quantity
Total ICE/VGAC Operating Time	hours	26,807
Overall VGAC Operational Time	%	28.2%
Estimated Total Hydrocarbons Removed	pounds	1,784
Estimated Hydrocarbon Removal Rate	pounds/hour	0.067

Table C3-2 - VGAC Influent Analytical Results
Cell 3: AS/SVE System in Cove Area

Month		January	February	March	April	May	June
Analyte (TO-15 Organics)	**Units**						
1,1,1-Trichloroethane	ug/m^3	*NS*	*10.9 U*	*NS*	*218 U*	*109 U*	*54.6 U*
1,1,2,2-Tetrachloroethane	ug/m^3	*NS*	*13.7 U*	*NS*	*275 U*	*137 U*	*68.7 U*
1,1,2-Trichloroethane	ug/m^3	*NS*	*5.46 U*	*NS*	*109 U*	*54.6 U*	*27.3 U*
1,1,2-Trichlorotrifluoroethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,1-Dichloroethane	ug/m^3	*NS*	*8.09 U*	*NS*	*162 U*	*80.9 U*	*40.5 U*
1,1-Dichloroethene	ug/m^3	*NS*	*7.93 U*	*NS*	*159 U*	*79.3 U*	*39.6 U*
1,2,4-Trichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2,4-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2-Dibromoethane (EDB)	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,2-Dichloroethane	ug/m^3	*NS*	*4.05 U*	*NS*	*80.9 U*	*40.5 U*	*20.2 U*
1,2-Dichloroethene (trans)	ug/m^3	*NS*	*7.93 U*	*NS*	*159 U*	*79.3 U*	*39.6 U*
1,2-Dichloropropane	ug/m^3	*NS*	*9.24 U*	*NS*	*185 U*	*92.4 U*	*46.2 U*
1,3,5-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,3-Butadiene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,3-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
1,3-Dichloropropene (cis)	ug/m^3	*NS*	*9.08 U*	*NS*	*182 U*	*90.8 U*	*45.4 U*
1,3-Dichloropropene (trans)	ug/m^3	*NS*	*9.08 U*	*NS*	*182 U*	*90.8 U*	*45.4 U*
1,4-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
2-Propanol	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
4-Ethyltoluene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Acetone	ug/m^3	*NS*	*475 U*	*NS*	*9500 U*	*4750 U*	*2380 U*
Benzene	ug/m^3	*NS*	**21,700**	*NS*	**16,300**	**22,700**	**5,510**
Benzyl chloride	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Bromodichloromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Bromoform	ug/m^3	*NS*	*20.7 U*	*NS*	*413 U*	*207 U*	*103 U*
Bromomethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Carbon disulfide	ug/m^3	*NS*	*6.23 U*	*NS*	*125 U*	*62.3 U*	*31.1 U*
Carbon tetrachloride	ug/m^3	*NS*	*6.29 U*	*NS*	*126 U*	*62.9 U*	*31.5 U*
Chlorobenzene	ug/m^3	*NS*	*9.21 U*	*NS*	*184 U*	*92.1 U*	*46 U*
Chloroethane	ug/m^3	*NS*	*5.28 U*	*NS*	*106 U*	*52.8 U*	*26.4 U*
Chloroform	ug/m^3	*NS*	*4.88 U*	*NS*	*97.7 U*	*48.8 U*	*24.4 U*
Chloromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
cis-1,2-Dichloroethene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Cyclohexane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Dibromochloromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Dichlorodifluoromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Dichlorotetrafluoroethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Ethanol	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Ethyl acetate	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Ethylbenzene	ug/m^3	*NS*	**43.5**	*NS*	*174 U*	*86.9 U*	*43.4 U*
Hexachloro-1,3-butadiene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Methyl butyl ketone	ug/m^3	*NS*	*8.19 U*	*NS*	*164 U*	*81.9 U*	*41 U*
Methyl ethyl ketone	ug/m^3	*NS*	*5.90 U*	*NS*	*118 U*	*59 U*	*29.5 U*
Methyl isobutyl ketone	ug/m^3	*NS*	*8.20 U*	*NS*	*164 U*	*82 U*	*41 U*
Methylene chloride	ug/m^3	*NS*	*38.8 U*	*NS*	*777 U*	*388 U*	*194 U*
Methyl-tert-butyl ether	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Naphthalene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
n-Heptane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
n-Hexane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Propylene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Styrene	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Tetrachloroethene	ug/m^3	*NS*	*6.78 U*	*NS*	*136 U*	*67.8 U*	*33.9 U*
Tetrahydrofuran	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Toluene	ug/m^3	*NS*	*3,280 U*	*NS*	*3010 U*	**2,610**	**926**
Trichloroethene	ug/m^3	*NS*	*5.37 U*	*NS*	*107 U*	*53.7 U*	*26.9 U*
Trichlorofluoromethane	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Vinyl acetate	ug/m^3	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Vinyl chloride	ug/m^3	*NS*	*5.11 U*	*NS*	*102 U*	*51.1 U*	*25.6 U*
Xylenes (m&p)	ug/m^3	*NS*	**471**	*NS*	*347 U*	**353**	**199**
Xylenes (o)	ug/m^3	*NS*	**314**	*NS*	*174 U*	**228**	**126**
Total Volatile Organics	ug/m^3	*NS*	**22,529**	*NS*	**16,300**	**25,891**	**6,761**

Notes:
BOLD = Analyte detected
ug/m^3 = micro grams per cubic meter
U = Non-detect
NS = Not Sampled

Table C3-2 - VGAC Influent Analytical Results
Cell 3: AS/SVE System in Cove Area

Month		July	August	September	October	November	December
Analyte (TO-15 Organics)	**Units**						
1,1,1-Trichloroethane	ug/m^3	*43.7 U*	*43.7 U*	*43.7 U*	*1.5 U*	*1.5 U*	*NS*
1,1,2,2-Tetrachloroethane	ug/m^3	*54.9 U*	*54.9 U*	*54.9 U*	*0.94 U*	*0.94 U*	*NS*
1,1,2-Trichloroethane	ug/m^3	*21.8 U*	*21.8 U*	*21.8 U*	*0.74 U*	*0.74 U*	*NS*
1,1,2-Trichlorotrifluoroethane	ug/m^3	*NS*	*NS*	*NS*	*2.1 U*	*2.1 U*	*NS*
1,1-Dichloroethane	ug/m^3	*32.4 U*	*32.4 U*	*32.4 U*	*1.1 U*	*1.1 U*	*NS*
1,1-Dichloroethene	ug/m^3	*31.7 U*	*31.7 U*	*31.7 U*	*1.1 U*	*1.1 U*	*NS*
1,2,4-Trichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*5.1 U*	*5.1 U*	*NS*
1,2,4-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	**2.4**	**10.3**	*NS*
1,2-Dibromoethane (EDB)	ug/m^3	*NS*	*NS*	*NS*	*2.1 U*	*2.1 U*	*NS*
1,2-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*1.6 U*	*1.6 U*	*NS*
1,2-Dichloroethane	ug/m^3	*16.2 U*	*16.2 U*	*16.2 U*	*0.55 U*	*0.55 U*	*NS*
1,2-Dichloroethene (trans)	ug/m^3	*31.7 U*	*31.7 U*	*31.7 U*	*1.1 U*	*1.1 U*	*NS*
1,2-Dichloropropane	ug/m^3	*37.0 U*	*37.0 U*	*37.0 U*	*1.3 U*	*1.3 U*	*NS*
1,3,5-Trimethylbenzene	ug/m^3	*NS*	*NS*	*NS*	**10.9**	**22.7**	*NS*
1,3-Butadiene	ug/m^3	*NS*	*NS*	*NS*	*0.6 U*	*0.60 U*	*NS*
1,3-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*1.6 U*	*1.6 U*	*NS*
1,3-Dichloropropene (cis)	ug/m^3	*36.3 U*	*36.3 U*	*36.3 U*	*1.2 U*	*1.2 U*	*NS*
1,3-Dichloropropene (trans)	ug/m^3	*36.3 U*	*36.3 U*	*36.3 U*	*1.2 U*	*1.2 U*	*NS*
1,4-Dichlorobenzene	ug/m^3	*NS*	*NS*	*NS*	*1.6 U*	*1.6 U*	*NS*
2-Propanol	ug/m^3	*NS*	*NS*	*NS*	*3.4 U*	**3.7**	*NS*
4-Ethyltoluene	ug/m^3	*NS*	*NS*	*NS*	**1.7**	*1.3 U*	*NS*
Acetone	ug/m^3	*1900 U*	*1900 U*	*1900 U*	**24.5**	**68.1**	*NS*
Benzene	ug/m^3	**7,520**	**30,200**	**3,680**	**7,700**	**63,400**	*NS*
Benzyl chloride	ug/m^3	*NS*	*NS*	*NS*	*1.4 U*	*1.4 U*	*NS*
Bromodichloromethane	ug/m^3	*NS*	*NS*	*NS*	*1.8 U*	*1.8 U*	*NS*
Bromoform	ug/m^3	*82.7 U*	*82.7 U*	*82.7 U*	*2.8 U*	*2.8 U*	*NS*
Bromomethane	ug/m^3	*NS*	*NS*	*NS*	*1.1 U*	*1.1 U*	*NS*
Carbon disulfide	ug/m^3	*24.9 U*	*24.9 U*	*24.9 U*	**2.4**	**8.1**	*NS*
Carbon tetrachloride	ug/m^3	*25.2 U*	*25.2 U*	*25.2 U*	*0.86 U*	*0.86 U*	*NS*
Chlorobenzene	ug/m^3	*36.8 U*	*36.8 U*	*36.8 U*	*1.3 U*	*1.3 U*	*NS*
Chloroethane	ug/m^3	*21.1 U*	*21.1 U*	*21.1 U*	*0.72 U*	*0.72 U*	*NS*
Chloroform	ug/m^3	*19.5 U*	*19.5 U*	*19.5 U*	*0.66 U*	*0.66 U*	*NS*
Chloromethane	ug/m^3	*NS*	*NS*	*NS*	*0.56 U*	**3.1**	*NS*
cis-1,2-Dichloroethene	ug/m^3	*NS*	*NS*	*NS*	*1.1 U*	*1.1 U*	*NS*
Cyclohexane	ug/m^3	*NS*	*NS*	*NS*	**2.7**	*0.94 U*	*NS*
Dibromochloromethane	ug/m^3	*NS*	*NS*	*NS*	*2.3 U*	*2.3 U*	*NS*
Dichlorodifluoromethane	ug/m^3	*NS*	*NS*	*NS*	**2.1**	**1.8**	*NS*
Dichlorotetrafluoroethane	ug/m^3	*NS*	*NS*	*NS*	*1.9 U*	*1.9 U*	*NS*
Ethanol	ug/m^3	*NS*	*NS*	*NS*	**7.7**	**22.1**	*NS*
Ethyl acetate	ug/m^3	*NS*	*NS*	*NS*	*0.98 U*	*0.98 U*	*NS*
Ethylbenzene	ug/m^3	*34.7 U*	**48**	*34.7 U*	**10.2**	**41.4**	*NS*
Hexachloro-1,3-butadiene	ug/m^3	*NS*	*NS*	*NS*	*2.9 U*	*2.9 U*	*NS*
Methyl butyl ketone	ug/m^3	*32.8 U*	*32.8 U*	*32.8 U*	*5.6 U*	*5.6 U*	*NS*
Methyl ethyl ketone	ug/m^3	*23.6 U*	*23.6 U*	*23.6 U*	*4 U*	*4.0 U*	*NS*
Methyl isobutyl ketone	ug/m^3	*32.8 U*	*32.8 U*	*32.8 U*	*5.6 U*	*5.6 U*	*NS*
Methylene chloride	ug/m^3	*155 U*	*155 U*	*155 U*	**17.8**	*4.7 U*	*NS*
Methyl-tert-butyl ether	ug/m^3	*NS*	*NS*	*NS*	*4.9 U*	*4.9 U*	*NS*
Naphthalene	ug/m^3	*NS*	*NS*	*NS*	**12.3**	**3.8**	*NS*
n-Heptane	ug/m^3	*NS*	*NS*	*NS*	**1.2**	**3.7**	*NS*
n-Hexane	ug/m^3	*NS*	*NS*	*NS*	**4.2**	**6.8**	*NS*
Propylene	ug/m^3	*NS*	*NS*	*NS*	*0.47 U*	**12.5**	*NS*
Styrene	ug/m^3	*NS*	*NS*	*NS*	*1.2 U*	**14.5**	*NS*
Tetrachloroethene	ug/m^3	*27.1 U*	*27.1 U*	*27.1 U*	*0.92 U*	*0.92 U*	*NS*
Tetrahydrofuran	ug/m^3	*NS*	*NS*	*NS*	*0.8 U*	*0.80 U*	*NS*
Toluene	ug/m^3	**1,220**	**3,250**	*603 U*	**1,130**	**2,230**	*NS*
Trichloroethene	ug/m^3	*21.5 U*	*21.5 U*	*21.5 U*	*0.74 U*	*0.74 U*	*NS*
Trichlorofluoromethane	ug/m^3	*NS*	*NS*	*NS*	*1.5 U*	*1.5 U*	*NS*
Vinyl acetate	ug/m^3	*NS*	*NS*	*NS*	*0.96 U*	*2.4 U*	*NS*
Vinyl chloride	ug/m^3	*20.4 U*	*20.4 U*	*20.4 U*	*0.35 U*	*0.35 U*	*NS*
Xylenes (m&p)	ug/m^3	**160**	**499**	*69.5 U*	**105**	**312**	*NS*
Xylenes (o)	ug/m^3	**112**	**343**	**46.6**	**82.7**	**183**	*NS*
Total Volatile Organics	ug/m^3	**9,012**	**34,340**	**3,727**	**9,118**	**66,348**	*NS*

Notes:
BOLD = Analyte detected
ug/m^3 = micro grams per cubic meter
U = Non-detect
NS = Not Sampled

Table C3-3
Cell 3 Groundwater Analytical Results

Sample ID		CO101-PZM			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
1,1,1-Trichloroethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
1,1,2-Trichloroethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
1,1-Dichloroethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
1,1-Dichloroethene	µg/L	*1 U*	*5 U*	*5 U*	*NS*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*5 U*	*5 U*	*NS*
1,2-Dibromoethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
1,2-Dichlorobenzene	µg/L	*1 U*	*5 U*	*5 U*	*NS*
1,2-Dichloroethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
1,2-Dichloropropane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
1,4-Dichlorobenzene	µg/L	*1 U*	*5 U*	*5 U*	*NS*
2-Butanone (MEK)	µg/L	*10 U*	*25 U*	**994**	*NS*
2-Hexanone	µg/L	*10 U*	*25 U*	**109**	*NS*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*25 U*	*25 U*	*NS*
Acetone	µg/L	**22.4 B**	**48.7 J**	**6,200**	*NS*
Benzene	µg/L	**17,400**	**10,400**	**5,690**	*NS*
Bromodichloromethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Bromoform	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Bromomethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Carbon disulfide	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Carbon tetrachloride	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Chlorobenzene	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Chloroethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Chloroform	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Chloromethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
cis-1,2-Dichloroethene	µg/L	*1 U*	*5 U*	*5 U*	*NS*
cis-1,3-Dichloropropene	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Dibromochloromethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Ethylbenzene	µg/L	**21.3**	**4 J**	**5**	*NS*
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Methylene Chloride	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Styrene	µg/L	**6.6**	*5 U*	*5 U*	*NS*
Tetrachloroethene	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Toluene	µg/L	**1,220**	**235**	**316**	*NS*
trans-1,2-Dichloroethene	µg/L	*1 U*	*5 U*	*5 U*	*NS*
trans-1,3-Dichloropropene	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Trichloroethene	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Trichlorofluoromethane	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Vinyl chloride	µg/L	*1 U*	*5 U*	*5 U*	*NS*
Xylenes	µg/L	**249**	**41.5**	**63.7**	*NS*
Total Volatile Organics	µg/L	**18,919**	**10,729**	**13,378**	**0.00**

Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**2,150**	**107**	**167**	*NS*

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C3-3
Cell 3 Groundwater Analytical Results

Sample ID		CO102-PZM			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*5 U*	*5 U*	*25 U*
1,2-Dibromoethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloropropane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
2-Butanone (MEK)	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
2-Hexanone	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
Acetone	µg/L	**67.7 B**	*25 U*	**89.4**	*50 U*
Benzene	µg/L	**15,700**	**11,900**	**25,200**	**22,300**
Bromodichloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromoform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromomethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon disulfide	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon tetrachloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	**3.3 J**
cis-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Dibromochloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Ethylbenzene	µg/L	**19.6**	**20.8**	**25.8**	**24**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Methylene Chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Styrene	µg/L	**6.1**	**6.3**	**8.1**	**8.3**
Tetrachloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Toluene	µg/L	**1,150**	**1,220**	**1,400**	**1,470**
trans-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichlorofluoromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Vinyl chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	µg/L	**238**	**240**	**287**	**292**
Total Volatile Organics	µg/L	**17,181**	**13,387**	**27,010**	**24,098**

Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**875**	**874**	**1,070**	**970**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C3-3
Cell 3 Groundwater Analytical Results

Sample ID		CO103-PZM			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,1-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*5 U*	*5 U*	*25 U*
1,2-Dibromoethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,2-Dichloropropane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
2-Butanone (MEK)	µg/L	*50 U*	*25 U*	*25 U*	**4.7 J**
2-Hexanone	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*25 U*	*25 U*	*50 U*
Acetone	µg/L	**76.1 B**	**50.6 L2**	**97.4**	**24.4 J**
Benzene	µg/L	**27,700**	**10,800**	**15,800**	**19,700**
Bromodichloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromoform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Bromomethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon disulfide	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Carbon tetrachloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chlorobenzene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloroform	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Chloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	**3.8 J**
cis-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Dibromochloromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Ethylbenzene	µg/L	**55.5**	**41.7**	**31.3**	**48.7**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Methylene Chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Styrene	µg/L	**10.4**	**8.1**	**3.1 J**	**10.1**
Tetrachloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Toluene	µg/L	**1,980**	**1,680**	**1,110**	**1,890**
trans-1,2-Dichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichloroethene	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Trichlorofluoromethane	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Vinyl chloride	µg/L	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	µg/L	**960**	**769**	**520**	**813**
Total Volatile Organics	µg/L	**30,782**	**13,349**	**17,562**	**22,495**

Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**12,300**	**7,210**	**1,970**	**3,510**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C3-3
Cell 3 Groundwater Analytical Results

Sample ID		CO104-PZM			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	µg/L	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	µg/L	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	µg/L	1 U	1 U	1 U	1 U
1,1-Dichloroethane	µg/L	1 U	1 U	1 U	1 U
1,1-Dichloroethene	µg/L	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	µg/L	5 U	1 U	1 U	5 U
1,2-Dibromoethane	µg/L	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	µg/L	1 U	1 U	1 U	1 U
1,2-Dichloroethane	µg/L	1 U	1 U	1 U	1 U
1,2-Dichloropropane	µg/L	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	µg/L	1 U	1 U	1 U	1 U
2-Butanone (MEK)	µg/L	10 U	5 U	5 U	10 U
2-Hexanone	µg/L	10 U	5 U	5 U	10 U
4-Methyl-2-pentanone (MIBK)	µg/L	10 U	5 U	5 U	10 U
Acetone	µg/L	10 U	**29.8 L2M0R1**	**114**	10 U
Benzene	µg/L	**16.5**	1 U	**5.5**	**4.1**
Bromodichloromethane	µg/L	1 U	1 U	1 U	1 U
Bromoform	µg/L	1 U	1 U	1 U	1 U
Bromomethane	µg/L	1 U	1 U	1 U	1 U
Carbon disulfide	µg/L	1 U	1 U	1 U	1 U
Carbon tetrachloride	µg/L	1 U	1 U	1 U	1 U
Chlorobenzene	µg/L	1 U	1 U	1 U	1 U
Chloroethane	µg/L	1 U	1 U	1 U	1 U
Chloroform	µg/L	1 U	1 U	1 U	1 U
Chloromethane	µg/L	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	µg/L	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	µg/L	1 U	1 U	1 U	1 U
Dibromochloromethane	µg/L	1 U	1 U	1 U	1 U
Ethylbenzene	µg/L	1 U	1 U	1 U	1 U
Methyl tert-butyl ether (MTBE)	µg/L	1 U	1 U	1 U	1 U
Methylene Chloride	µg/L	1 U	1 U	1 U	1 U
Styrene	µg/L	1 U	1 U	1 U	1 U
Tetrachloroethene	µg/L	1 U	1 U	1 U	1 U
Toluene	µg/L	**1.1**	1 U	1 U	**0.27 J**
trans-1,2-Dichloroethene	µg/L	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	µg/L	1 U	1 U	1 U	1 U
Trichloroethene	µg/L	1 U	1 U	1 U	1 U
Trichlorofluoromethane	µg/L	1 U	1 U	1 U	1 U
Vinyl chloride	µg/L	1 U	1 U	1 U	1 U
Xylenes	µg/L	3 U	1 U	1 U	3 U
Total Volatile Organics	µg/L	**17.6**	**29.8**	**120**	**4.37**

Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**5.5**	2 U	**2.2**	**1.1 J**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C3-3
Cell 3 Groundwater Analytical Results

Sample ID		CO30-PZM015			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
1,1-Dichloroethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
1,1-Dichloroethene	µg/L	*5 U*	*NS*	*5 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*NS*	*5 U*	*25 U*
1,2-Dibromoethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*NS*	*5 U*	*5 U*
1,2-Dichloroethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
1,2-Dichloropropane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*NS*	*5 U*	*5 U*
2-Butanone (MEK)	µg/L	*50 U*	*NS*	*25 U*	*50 U*
2-Hexanone	µg/L	*50 U*	*NS*	*25 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*NS*	*25 U*	*50 U*
Acetone	µg/L	**46.2 JB**	*NS*	**159**	*50 U*
Benzene	µg/L	**52,800**	*NS*	**88,400**	**67,500**
Bromodichloromethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Bromoform	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Bromomethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Carbon disulfide	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Carbon tetrachloride	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Chlorobenzene	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Chloroethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Chloroform	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Chloromethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*NS*	*5 U*	**6**
cis-1,3-Dichloropropene	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Dibromochloromethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Ethylbenzene	µg/L	**71.3**	*NS*	**118**	**102**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Methylene Chloride	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Styrene	µg/L	**10.9**	*NS*	**18.3**	**15.5**
Tetrachloroethene	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Toluene	µg/L	**3,620**	*NS*	**5,860**	**4,720**
trans-1,2-Dichloroethene	µg/L	*5 U*	*NS*	*5 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Trichloroethene	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Trichlorofluoromethane	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Vinyl chloride	µg/L	*5 U*	*NS*	*5 U*	*5 U*
Xylenes	µg/L	**1,060**	*NS*	**1,620**	**1,440**
Total Volatile Organics	µg/L	**57,608**	**0.00**	**96,175**	**73,784**

Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**1,830**	*NS*	**3,560**	**3,440**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C3-3
Cell 3 Groundwater Analytical Results

Sample ID		CO30-PZM060			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*NS*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*NS*	*5 U*	*10 U*
2-Hexanone	µg/L	*10 U*	*NS*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*NS*	*5 U*	*10 U*
Acetone	µg/L	*10 U*	*NS*	**58.8**	*10 U*
Benzene	µg/L	*1 U*	*NS*	**5.2**	**8.1**
Bromodichloromethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Bromomethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Carbon disulfide	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Chloroethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Chloroform	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Chloromethane	µg/L	*1 U*	*NS*	*1 U*	**1.3**
cis-1,2-Dichloroethene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
cis-1,3-Dichloropropene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Ethylbenzene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Methylene Chloride	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Styrene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Tetrachloroethene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Toluene	µg/L	*1 U*	*NS*	**1.2**	*1 U*
trans-1,2-Dichloroethene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Trichlorofluoromethane	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*NS*	*1 U*	*1 U*
Xylenes	µg/L	*3 U*	*NS*	*1 U*	*3 U*
Total Volatile Organics	µg/L	**0.00**	**0.00**	**65.2**	**9.40**

Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	*2 U*	*NS*	**2 J**	*2 U*

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C5-1
Cell 5 Well Construction Information

Monitoring Well Designation	Monitoring Well Temporary Identification	Installation Method	Northing	Easting	Top of Casing Elevation	Protection Cover Type	Well Total Depth	Riser Length	Screen Length	Filter Pack Interval	Seal Interval	Grout Interval
CO23-PZM008	----------	Hollow Stem Auger	561783.979	1457095.859	15.74	Flush Mount	19	9	10	19-7	7-5	5-0
CO24-PZM007	----------	Hollow Stem Auger	562048.175	1457276.816	15.95	Flush Mount	19.00	9.00	10.00	19-7	7-5	5-0
CO26-PZM007	----------	Hollow Stem Auger	561682.425	1458048.048	12.76	Flush Mount	20.00	10.00	10.00	20-8	8-6	6-0
CO55-PZM000	Cell 5 - MW1 (S)	Hollow Stem Auger	561434.420	1457585.900	15.10	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO55-PZM000	Cell 5 - MW1 (S)	Hollow Stem Auger	561434.420	1457585.900	15.10	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO55-PZM000	Cell 5 - MW1 (S)	Hollow Stem Auger	561434.420	1457585.900	15.10	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO56-PZP001	Cell 5 - MW2 (S)	Hollow Stem Auger	561668.410	1457790.050	15.92	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO57-PZP002	Cell 5 - MW3 (S)	Hollow Stem Auger	561122.520	1457530.000	16.59	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO58-PZM001	Cell 5 - MW4 (S)	Hollow Stem Auger	561331.310	1457989.130	14.31	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO59-PZP002	Cell 5 - MW5 (S)	Hollow Stem Auger	561446.980	1457308.790	16.75	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2
CO60-PZP001	Cell 5 - MW6 (S)	Hollow Stem Auger	561872.550	1457913.360	15.83	Steel Riser	15.00	5.00	10.00	3-15	2-3	0-2

Table C5-2
Well Groundwater Elevations

Well ID	Temporary Well ID	Top of PVC Elevation (ft)	Aquifer	Well Depth from Ground Surface (ft)	3/22/2017-3/23/2017		6/12/2017-6/13/2017		10/18/2017		12/15/2017-12/18/2017	
					Depth to Groundwater	Groundwater Elevation (ft)	Depth to Groundwater	Groundwater Elevation (ft)	Depth to Groundwater	Groundwater Elevation (ft)	Depth to Groundwater	Groundwater Elevation (ft)
CO55-PZM000	Cell 5 - MW1 (S)	15.10	S	15.00	15.32	-0.22	16.35	-1.25	16.69	-1.59	16.8	-1.7
CO56-PZP001	Cell 5 - MW2 (S)	15.92	S	15.00	16.14	-0.22	15.05	0.87	15.17	0.75	15.76	0.16
CO57-PZP002	Cell 5 - MW3 (S)	16.59	S	15.00	16.82	-0.23	15.25	1.34	15.6	0.99	17.82	-1.23
CO58-PZM001	Cell 5 - MW4 (S)	14.31	S	15.00	14.57	-0.26	13.61	0.7	13.61	0.70	14.43	-0.12
CO59-PZP002	Cell 5 - MW5 (S)	16.75	S	15.00	16.95	-0.20	15.9	0.85	15.97	0.78	16.55	0.2
CO60-PZP001	Cell 5 - MW6 (S)	15.83	S	15.00	16.08	-0.25	15	0.83	15.09	0.74	15.91	-0.08
CO23-PZM008		15.74	S	19.00	NM	NM	NM	NM	14.86	0.88	15.37	0.37
CO24-PZM007		15.95	S	19.00	15.48	0.47	14.6	1.35	14.5	1.45	15.04	0.91
CO26-PZM007		12.76	S	20.00	12.92	-0.16	15	-2.24	11.92	0.84	13.96	-1.2
	EXT WELL 1	0.00			NM	NM	NM	NM	10.93	-10.93	NM	NM
	EXT WELL 2	0.00			NM	NM	NM	NM	10.27	-10.27	NM	NM
	EXT WELL 3	0.00			NM	NM	NM	NM	11.24	-11.24	NM	NM
	EXT WELL 4	0.00			NM	NM	NM	NM	10.87	-10.87	NM	NM
	EXT WELL 5	0.00			NM	NM	NM	NM	10.96	-10.96	NM	NM
	EXT WELL 6	0.00			NM	NM	NM	NM	10.15	-10.15	NM	NM
	EXT WELL 7	0.00			NM	NM	NM	NM	10.6	-10.60	NM	NM
	EXT WELL 8	0.00			NM	NM	NM	NM	10.82	-10.82	NM	NM
	EXT WELL 9	0.00			NM	NM	NM	NM	10.08	-10.08	NM	NM
	EXT WELL 10	0.00			NM	NM	NM	NM	9.26	-9.26	NM	NM
	EXT WELL 11	0.00			NM	NM	NM	NM	7.53	-7.53	NM	NM
	EXT WELL 12	0.00			NM	NM	NM	NM	9.21	-9.21	NM	NM

Notes:

I = Intermediate depth wells
S = Water table well
NM = Not Measured

Table C5-3: Summary of Operation
Cell 5: DPE System

Parameter	Units	Q1 1/1 - 3/31	Q2 4/1 - 6/30	Q3 7/1 - 9/30	Q4 10/1 - 12/31	Total 1/1 - 12/31
Total Discharge	gallons	590,669	1,331,191	1,812,454	1,952,173	5,686,487
Influence Total Concentrations	lbs/gal	0.000046	0.00013	0.000052	0.000033	0.00026
Effluence Total Concentrations	lbs/gal	0	0.00000050	0	0	0.00000050
Influence Hydrocarbons	lbs	27.0	176	93.9	65.4	362
Effluence Hydrocarbons	lbs	0	0.67	0	0	0.67
Total Hydrocarbons Removed	lbs	27.0	175	93.9	65.4	362

Table C5-4
Cell 5 DNAPL Occurrence and Recovery

Well ID	Total DNAPL Recovery Period		Pre-2017		Estimated DNAPL Recovered Q1		Estimated DNAPL Recovered Q2		Estimated DNAPL Recovered Q3		Estimated DNAPL Recovered Q4		Cumulative Total DNAPL Recovered	
	Begin	End	(gal)	(lbs) (a)	(gal)	(lbs) (a)	(gal)	(lbs) (a)	(gal)	(lbs) (a)	(gal)	(lbs) (a)	(gal)	(lbs) (a)
CO123	1-Jan-16	On-going (b)	298	2,860	50	480	0	0	0	0	0	0	348	3,340
CO124	1-Jan-16	On-going (b)	150	1,440	100	960	0	0	0	0	0	0	250	2,399
CO125	1-Jan-16	On-going (b)	0	0	0	0	0	0	0	0	0	0	0	0
CO169	1-Jan-16	On-going (b)	0	0	50	480	0	0	0	0	0	0	50	480
		Total Recovery:	**448**	**4,300**	**200**	**1,919**	**0**	**0**	**0**	**0**	**0**	**0**	**648**	**6,219**

Notes:

(a) Weight is calculated based on oil density of 1.15 grams per cubic centimeter.

(b) Skimmer

(c) Bailing

Table C5-5
Cell 5 Groundwater Analytical Results

Sample ID		CO23-PZM008			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
1,1-Dichloroethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
1,1-Dichloroethene	µg/L	*NS*	*NS*	*5 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*NS*	*NS*	*5 U*	*25 U*
1,2-Dibromoethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*NS*	*NS*	*5 U*	*5 U*
1,2-Dichloroethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
1,2-Dichloropropane	µg/L	*NS*	*NS*	*5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*NS*	*NS*	*5 U*	*5 U*
2-Butanone (MEK)	µg/L	*NS*	*NS*	*25 U*	*50 U*
2-Hexanone	µg/L	*NS*	*NS*	*25 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*NS*	*NS*	*25 U*	*50 U*
Acetone	µg/L	*NS*	*NS*	**67.7**	**19.3**
Benzene	µg/L	*NS*	*NS*	**564**	**657**
Bromodichloromethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
Bromoform	µg/L	*NS*	*NS*	*5 U*	*5 U*
Bromomethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
Carbon disulfide	µg/L	*NS*	*NS*	*5 U*	*5 U*
Carbon tetrachloride	µg/L	*NS*	*NS*	*5 U*	*5 U*
Chlorobenzene	µg/L	*NS*	*NS*	*5 U*	*5 U*
Chloroethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
Chloroform	µg/L	*NS*	*NS*	*5 U*	*5 U*
Chloromethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*NS*	*NS*	*5 U*	*5 U*
cis-1,3-Dichloropropene	µg/L	*NS*	*NS*	*5 U*	*5 U*
Dibromochloromethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
Ethylbenzene	µg/L	*NS*	*NS*	**23.2**	**34.2**
Methyl tert-butyl ether (MTBE)	µg/L	*NS*	*NS*	*5 U*	*5 U*
Methylene Chloride	µg/L	*NS*	*NS*	*5 U*	*5 U*
Styrene	µg/L	*NS*	*NS*	**19.8**	**30.2**
Tetrachloroethene	µg/L	*NS*	*NS*	*5 U*	*5 U*
Toluene	µg/L	*NS*	*NS*	**217**	**374**
trans-1,2-Dichloroethene	µg/L	*NS*	*NS*	*5 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*NS*	*NS*	*5 U*	*5 U*
Trichloroethene	µg/L	*NS*	*NS*	*5 U*	*5 U*
Trichlorofluoromethane	µg/L	*NS*	*NS*	*5 U*	*5 U*
Vinyl chloride	µg/L	*NS*	*NS*	*5 U*	*5 U*
Xylenes	µg/L	*NS*	*NS*	**373**	**543**
Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	*NS*	*NS*	**4,260**	**4,300**
Total Volatile Organics	µg/L	**0.00**	**0.00**	**5,525**	**5,958**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C5-5
Cell 5 Groundwater Analytical Results

Sample ID		CO24-PZM007			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	*5 U*	**3.5 J**
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	**35.6**	**22.7 L2**	**47.8**	**23.2**
Benzene	µg/L	**5**	**3.7**	**5.1**	**4.4**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromomethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	**0.27 J**
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloromethane	µg/L	**1.4**	*1 U*	*1 U*	**0.84 J**
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	**4.5**	**2.8**	**7.4**	**4.1**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	**3.4**	**2.4**	**3.5**	**3.7**
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	**0.49 J**
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	**10.9**	**6.7**	**13**	**8.5**
Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**5900 L1**	**2,130**	**4,160**	**2,360**
Total Volatile Organics	µg/L	**5,961**	**2,168**	**4,237**	**2,409**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C5-5
Cell 5 Groundwater Analytical Results

Sample ID		CO26-PZM007			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	*5 U*	**0.87 J**
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	*10 U*	*5 U*	**38.7**	**5.3 J**
Benzene	µg/L	**410**	*1 U*	**351**	**366**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromomethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	**14.7**	*1 U*	**11.3**	**13.1**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	**97.8**	*1 U*	**69.5**	**77.5**
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	**236**	*1 U*	**202**	**201**
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	**337**	*1 U*	**242**	**281**
Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**6130 L1**	*2 U*	**2,390**	**3,310**
Total Volatile Organics	µg/L	**7,226**	**0.00**	**3,305**	**4,255**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C5-5
Cell 5 Groundwater Analytical Results

Sample ID		CO55-PZM000			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	**81.5**	**1.8 J**
2-Hexanone	µg/L	*10 U*	*5 U*	**25.6**	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	**50 MHR1**	*5 U*	**372**	**6 J**
Benzene	µg/L	*1 U*	**9.4**	**11.8**	**47.5**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromomethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	**0.32 J**
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloromethane	µg/L	**1.6**	*1 U*	*1 U*	*1 U*
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	**1.9**
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	*1 U*	**0.23 J**	**0.53 J**	**3**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	*1 U*	*1 U*	*1 U*	**2.3**
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	**0.33 JML**	**5.9**	**6**	**32**
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	*3 U*	**5.8**	**8.6**	**54.7**
Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	*2 U*	**76.7**	**91.7**	**331**
Total Volatile Organics	µg/L	**51.9**	**98.0**	**598**	**481**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C5-5
Cell 5 Groundwater Analytical Results

Sample ID		CO56-PZP001			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
1,1,1-Trichloroethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
1,1,2,2-Tetrachloroethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
1,1,2-Trichloroethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
1,1-Dichloroethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
1,1-Dichloroethene	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
1,2-Dibromo-3-chloropropane	µg/L	*25 U*	*1 U*	*5 U*	*25 U*
1,2-Dibromoethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
1,2-Dichlorobenzene	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
1,2-Dichloroethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
1,2-Dichloropropane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
2-Butanone (MEK)	µg/L	*50 U*	*5 U*	*25 U*	*50 U*
2-Hexanone	µg/L	*50 U*	*5 U*	*25 U*	*50 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*50 U*	*5 U*	*25 U*	*50 U*
Acetone	µg/L	**50.2**	**7.6 JL2**	**109**	**16.2 J**
Benzene	µg/L	**437**	**345**	**385**	**438**
Bromodichloromethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Bromoform	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Bromomethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Carbon disulfide	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Carbon tetrachloride	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Chlorobenzene	µg/L	*5 U*	**0.6 J**	*5 U*	*5 U*
Chloroethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Chloroform	µg/L	*5 U*	**0.5 J**	*5 U*	*5 U*
Chloromethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
cis-1,2-Dichloroethene	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
cis-1,3-Dichloropropene	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Dibromochloromethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Ethylbenzene	µg/L	**14**	**9.2**	**14.3**	**13.8**
Methyl tert-butyl ether (MTBE)	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Methylene Chloride	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Styrene	µg/L	**78.5**	**36.2**	**63**	**85.3**
Tetrachloroethene	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Toluene	µg/L	**186**	**149**	**103**	**140**
trans-1,2-Dichloroethene	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
trans-1,3-Dichloropropene	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Trichloroethene	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Trichlorofluoromethane	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Vinyl chloride	µg/L	*5 U*	*1 U*	*5 U*	*5 U*
Xylenes	µg/L	**313**	**196**	**282**	**289**
Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**17900 L1**	**4,670**	**3,440**	**4,130**
Total Volatile Organics	µg/L	**18,979**	**5,414**	**4,396**	**5,112**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C5-5
Cell 5 Groundwater Analytical Results

Sample ID		CO57-PZP002			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	**6.9 J**	*10 U*
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	**33.8 B**	**14.9**	**120**	**6.4 J**
Benzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromomethane	µg/L	**7.5**	**2.4**	**1.1**	**0.95 J**
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloromethane	µg/L	**3**	*1 U*	**1.5**	**3.3**
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	**0.29 J**
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	*3 U*	*1 U*	*1 U*	*3 U*
Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	*2 U*	*2 U*	**4.2**	*2 U*
Total Volatile Organics	µg/L	**44.3**	**17.3**	**134**	**10.9**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C5-5
Cell 5 Groundwater Analytical Results

Sample ID		CO58-PZM001			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	**0.39 J**	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	**5.1 J**	*10 U*
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	**19.9**	*5 U*	**56.2**	**3.8 J**
Benzene	µg/L	**316**	**187**	**256**	**238**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromomethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	**0.42 J**	*1 U*	**0.55 J**
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloromethane	µg/L	**3.8**	*1 U*	*1 U*	*1 U*
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	**13.4**	**5.9**	**12.4**	**11.8**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	**45.1**	**14.1**	**38.5**	**34.3**
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	**146**	**63.3**	**106**	**93.9**
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	**249**	**102**	**213**	**207**
Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**3040 L1**	**1,420**	**1,980**	**2,310**
Total Volatile Organics	µg/L	**3,834**	**1,793**	**2,667**	**2,899**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C5-5
Cell 5 Groundwater Analytical Results

Sample ID		CO59-PZP002			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	**5.9 J**	*10 U*
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	**19**	**9.5 JL2**	**64.5**	**5.8 J**
Benzene	µg/L	**393**	*1 U*	*1 U*	**144**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromomethane	µg/L	*1 U*	*1 U*	**1.7**	*1 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	**0.43 J**
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloromethane	µg/L	**1**	*1 U*	**1.4**	**1**
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	**19.5**	*1 U*	*1 U*	**7.4**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	**22.8**	*1 U*	*1 U*	**2.1**
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	**230**	*1 U*	**0.37 J**	**64.7**
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	**325**	*1 U*	**2.9 J**	**116**
Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**4720 L1**	**3.3**	**1.3 J**	**492**
Total Volatile Organics	µg/L	**5,730**	**12.8**	**78.1**	**833**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C5-5
Cell 5 Groundwater Analytical Results

Sample ID		CO60-PZP001			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/1/2017	6/1/2017	9/1/2017	12/1/2017
Volatile Organic Compounds	**Units**				
1,1,1,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,1-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2,2-Tetrachloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1,2-Trichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,1-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dibromo-3-chloropropane	µg/L	*5 U*	*1 U*	*1 U*	*5 U*
1,2-Dibromoethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,2-Dichloropropane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
2-Butanone (MEK)	µg/L	*10 U*	*5 U*	**5.1 J**	**3.8 J**
2-Hexanone	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	*10 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	**23**	**9.7 JL2**	**84.9**	**38.7**
Benzene	µg/L	**151**	**133**	**260**	**310**
Bromodichloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromoform	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Bromomethane	µg/L	**3**	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Carbon tetrachloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chlorobenzene	µg/L	*1 U*	**0.26 J**	**0.56 J**	**0.61 J**
Chloroethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Chloroform	µg/L	**1.7**	**1.8**	*1 U*	**0.32 J**
Chloromethane	µg/L	**1.8**	*1 U*	**1.1**	*1 U*
cis-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	**0.32 J**
cis-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Dibromochloromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Ethylbenzene	µg/L	**3.7**	**2.4**	**7.1**	**8.7**
Methyl tert-butyl ether (MTBE)	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Styrene	µg/L	**16.4**	**3.4**	**17.6**	**45.6**
Tetrachloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	**19.3**	**12.9**	**33.8**	**31**
trans-1,2-Dichloroethene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	µg/L	*1 U*	*1 U*	*1 U*	**0.64 J**
Trichlorofluoromethane	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	µg/L	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	µg/L	**73.9**	**47.3**	**140**	**176**
Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**676**	**373**	**1000**	**2,020**
Total Volatile Organics	µg/L	**970**	**584**	**1,550**	**2,636**

Notes:

Bold = Analyte Detected
U = Analyte not detected above laboratory reporting limit
J = The positive result reported for this analyte is a quantitative estimate
NS = Not Sampled
µg/L = Micrograms per liter

Table C6-1
Cell 6 LNAPL Recovery in Former Benzol Processing Area

Method	Recovery Period		Pre-2017		LNAPL Recovered Q1		LNAPL Recovered Q2		LNAPL Recovered Q3		LNAPL Recovered Q4		Cumulative Total LNAPL Recovered	
	Begin	**End**	**(gal)**	**(lbs)** (b)	**(gal)**	**(lbs)** (b)	**(gal)**	**(lbs)** (b)	**(gal)**	**(lbs)** (b)	**(gal)**	**(lbs)** (b)	**(gal)**	**(lbs)** (b)
Bailing and Skimming	7/23/2010	8/1/2016	15,797	115760.4	0	0	0	0	100	733	0	0	15,897	116,493
Cell 6 MPE System	10/1/2016	On-going	1100	8,061	350.6	2,569	406	2,975	383	2,807	406	2,975	2,646	19,387
		Total Recovery	**16,897**	**123,821**	**350.6**	**2,569**	**406**	**2,975**	**483**	**3,540**	**406**	**2,975**	**18,543**	**135,880**

Notes:

(a) Cumulative recovery volumes are calculated using an estimated recovery from 12/28/11 to 1/18/12 as well as 5/24/12 to 6/22/12.

(b) Weight is calculated based on average BP-MW-05 and BP-MW-08 oil density of 0.878 grams per cubic centimeter, measured by EA (2009) by ASTM Method D1481

APPENDIX A

2017 Field Records

SITE CO PROJECT Q4 WELL NO. CO58-PZM001 DATE 3/23/17

WELL DEPTH 19.5' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 14.57 WATER LEVEL END 14.58

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
907	11.96	17.74	2.16	3.91	7.2	1.38	-65	
912	11.95	16.36	2.18	2.00	4.2	1.39	-146	
917	12.01	15.70	2.20	1.51	1.9	1.41	-162	
922	12.05	14.94	2.23	1.27	0.0	1.43	-171	
927	12.07	14.20	2.28	1.11	0.0	1.46	-168	
0930	12.08	13.95	2.30	1.09	0.0	1.47	-166	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. C026-PZM007 DATE 3/23/17

WELL DEPTH _____ SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 12.92 WATER LEVEL END 13.54

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
0951	10.66	13.47	0.460	4.89	8.7	0.299	-29	
0956	10.98	13.43	0.538	3.49	16.9	0.350	-39	
1001	11.44	13.45	0.820	2.48	27.5	0.536	-94	
1006	11.56	13.55	1.06	2.07	27.0	0.684	-128	
1011	11.70	13.72	1.33	1.56	22.5	0.851	-152	
1016	11.80	13.87	1.76	1.23	15.7	1.14	-174	
1021	11.85	14.04	2.05	1.07	10.7	1.33	-185	
1026	11.90	14.08	2.25	0.89	5.9	1.45	-196	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. C060-PZP001 DATE 3/23/16

WELL DEPTH 19' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 16.08 WATER LEVEL END 16.10

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1046	11.41	13.86	1.91	1.43	31.2	1.22	-107	
1051	11.42	13.16	1.91	1.17	13.1	1.22	-95	
1056	11.44	13.06	1.89	0.88	5.7	1.21	-98	
1101	11.45	13.09	1.92	0.70	3.4	1.23	-111	
1106	11.45	13.06	1.90	0.61	1.3	1.21	-121	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO56-PZP001 DATE 3/23/17

WELL DEPTH 19' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 16.14 WATER LEVEL END 16.15

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1126	11.64	13.87	2.37	0.78	0.5	1.49	-135	
1131	11.60	13.58	2.32	0.56	0.0	1.48	-181	
1136	11.61	13.39	2.32	0.50	0.0	1.49	-178	
1141	11.61	13.14	2.33	0.47	0.0	1.49	-178	
~~1146~~								

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. C055-PZM000 DATE 3/23/17

WELL DEPTH 17' SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 15.32 WATER LEVEL END 16.22

	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
1302	11.50	10.80	1.73	10.94	89.9	1.19	-31	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

Well was running out of water. No recharge.

Took grab sample @ 1302

SITE CO PROJECT Q1 WELL NO. COS9-PZP002 DATE 3/23/17

WELL DEPTH 19' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 16.95 WATER LEVEL END 16.97

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1329	12.00	11.05	2.41	7.19	5.2	1.54	-80	
1334	11.98	10.86	2.44	6.68	1.2	1.56	-94	
1339	12.01	10.70	2.48	6.52	0.0	1.59	-117	
1344	12.03	10.51	2.56	6.30	0.0	1.64	-134	
1349	12.05	10.41	2.57	6.13	0.0	1.65	-142	
1354	12.04	10.26	2.62	5.95	0.0	1.68	-152	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO24-PZM007 DATE 3/23/17

WELL DEPTH 22' SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 15.48 WATER LEVEL END 15.54

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1448	10.77	13.55	0.915	9.13	5.7	0.585	-22	
1453	10.63	13.43	0.876	7.20	8.8	0.561	-42	
1458	10.58	13.32	0.925	6.46	13.0	0.596	-47	
1503	10.41	13.13	1.16	5.98	22.6	0.748	-72	
1508	10.26	12.87	1.42	5.58	14.1	0.915	-112	
1513	10.13	12.66	1.61	5.34	10.6	1.04	-131	
1518	10.06	12.47	1.77	5.19	6.3	1.14	-131	
1523	10.04	12.32	1.85	5.03	1.5	1.19	-140	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. C093 DATE 3/22/17

WELL DEPTH 20' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 10.75 WATER LEVEL END 10.77

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
0922	11.88	14.11	1.67	8.30	123	1.10	-300	
0927	11.74	13.80	1.73	6.35	107	1.11	-317	
0932	11.76	13.48	1.75	6.05	68.5	1.12	-312	
0937	11.78	12.87	1.81	5.73	16.4	1.16	-301	
0942	11.84	12.40	1.84	5.48	2.9	1.18	-300	
0945	11.84	12.26	1.88	5.61	0.0	1.20	-302	
0948	11.85	12.03	1.92	5.51	0.0	1.23	-303	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO101-PZM DATE 3/22/17

WELL DEPTH 20.5' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 12.62 WATER LEVEL END 12.62

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1010	11.41	12.61	1.56	1.03	43.4	0.994	-232	
1015	11.26	12.48	1.43	1.25	2.2	0.918	-202	
1020	11.55	12.47	1.67	1.40	0.0	1.07	-184	
1025	11.67	12.42	1.80	1.07	0.0	1.15	-189	
1030	11.74	12.27	1.91	0.93	0.0	1.22	-192	
1035	11.79	12.19	1.99	0.81	0.0	1.28	-196	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO30-PZM015 DATE 3/22/17

WELL DEPTH 27.5 SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 12.57 WATER LEVEL END 12.58

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1110	12.19	11.29	2.84	3.02	0.0	1.81	-207	
1115	12.14	11.47	2.76	1.41	0.0	1.77	-218	
1120	12.16	11.27	2.77	1.06	0.0	1.77	-226	
1125	12.15	11.25	2.78	0.84	0.0	1.78	-231	
1130	12.16	11.32	2.77	0.80	0.0	1.77	-214	
1135	12.16	11.40	2.77	0.75	0.0	1.77	-217	xsample

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO30-PZM060 DATE 3/22/17

WELL DEPTH 72' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 14.28 WATER LEVEL END 14.23

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1152	7.28	11.92	10.5	5.54	10.7	6.54	-179	
1157	7.25	11.64	10.6	3.37	11.4	6.58	-160	
1202	7.28	11.84	10.6	2.52	5.5	6.56	-156	
1207	7.29	11.95	10.5	2.21	0.0	6.53	-154	
1212	7.31	11.95	10.4	1.98	0.0	6.45	-154	
1215	7.33	12.01	10.5	1.91	0.0	6.48	-154	
1218	7.32	12.06	10.4	1.85	0.0	6.46	-154	sample

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. C0104-PZMxxx DATE 3/22/17

WELL DEPTH 20' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 14.13 WATER LEVEL END 14.35

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1310	11.70	13.26	5.51	7.82	0.0	3.47	-169	
1315	11.66	13.50	5.49	6.38	0.0	3.46	-149	
1320	11.65	13.69	5.48	5.75	0.0	3.45	-141	
1325	11.64	13.76	5.44	5.52	0.0	3.42	-137	
1330	11.62	13.83	5.32	5.42	0.0	3.33	-129	
1333	11.61	13.89	5.28	5.32	0.0	3.32	-127	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO103-PZM DATE 3/22/17

WELL DEPTH 20.5' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 13.70 WATER LEVEL END 13.73

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1359	12.45	14.56	4.45	7.83	0.0	2.84	-232	
1404	12.30	14.29	4.44	6.57	0.0	2.84	-229	
1409	12.30	14.17	4.47	6.09	0.0	2.85	-226	
1414	12.29	14.32	4.47	5.73	0.0	2.86	-225	
1419	12.29	14.34	4.47	5.55	0.0	2.86	-225	
1424	12.30	14.33	4.45	5.36	0.0	2.85	-224	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO102-RZM DATE 3/22/17

WELL DEPTH 19.5 SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 13.12 WATER LEVEL END 13.17

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1445	11.84	14.76	1.88	7.35	0.0	1.20	-196	
1450	11.77	14.64	1.83	5.72	0.0	1.17	-207	
1455	11.79	14.48	1.81	4.90	0.0	1.16	-211	
1500	11.80	14.26	1.82	4.48	0.0	1.17	-230	
1505	11.81	13.92	1.85	4.07	0.0	1.18	-230	
1508	11.81	13.84	1.85	3.94	0.0	1.18	-233	
1511	11.82	13.73	1.85	3.80	0.0	1.18	-236	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. COS7-PZ1002 DATE 3/22/17

WELL DEPTH 181 SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 16.82 WATER LEVEL END _____

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
								1536

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

Very little water in well. Took grab sample

SITE CO PROJECT Q1 WELL NO. C042-PZM004 DATE 3/21/17

WELL DEPTH 16.5' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 3.95 WATER LEVEL END 4.60

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
0927	7.56	16.09	1.29	4.19	0.0	0.824	254	
0932	7.77	15.22	1.30	3.10	0.0	0.831	208	
0937	7.83	14.61	1.31	2.70	0.0	0.840	189	
0942	7.84	13.91	1.33	2.53	0.0	0.854	174	
0947	7.84	13.37	1.36	2.46	0.0	0.867	163	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO40-PZM008 DATE 3/21/17

WELL DEPTH 18' SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 7.15 WATER LEVEL END 7.30

Time (00:00)	PH (0.00) +/- 0.2	TEMP (C)	Conductivity (mS/cm) +/- 3%	DO (mg/L) +/- 0.2	TURB (NTU)	TDS (g/L)	ORP (mv) +/- 20	Water Level Stop/Start
1007	~~11.84~~ 8.46	11.72	3.90	10.60	0.0	2.50	106	xarea is flooded from broken vault on hill
1012	8.47	11.29	3.95	7.93	0.0	2.53	18	
1017	8.47	11.47	3.94	7.14	0.0	2.52	-31	
1022	8.47	11.54	3.94	6.40	0.0	2.52	-72	
1027	8.48	11.59	3.95	5.80	0.0	2.53	-108	
1030	8.48	11.64	3.95	5.58	0.0	2.53	-117	
1033	8.48	11.63	3.95	5.40	0.0	2.53	-129	
1036	8.48	11.61	3.96	5.21	0.0	2.53	-134	xsample

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO39-PZM007 DATE 3/21/17

WELL DEPTH 18' SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 5.94 WATER LEVEL END 6.25

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1055	10.31	12.43	3.91	4.60	7.7	2.49	-202	
1100	10.37	12.40	3.87	1.76	3.5	2.48	-237	
1105	10.41	12.36	3.87	1.34	5.5	2.48	-241	
1110	10.42	12.36	3.87	1.13	3.0	2.48	-247	
1115	10.43	12.34	3.86	0.99	1.7	2.47	-250	
1120	10.42	12.31	3.86	0.85	0.5	2.47	-248	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. C039-PZMW12 DATE 3/21/17

WELL DEPTH 47' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 8.29 WATER LEVEL END 8.29

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1137	11.86	13.44	3.33	3.36	40.8	2.13	-305	
1142	11.83	13.87	3.26	1.43	18.8	2.08	-320	
1147	11.82	14.03	3.24	1.15	10.5	2.08	-327	
1152	11.82	14.23	3.22	0.98	6.1	2.06	-329	
1157	11.81	14.47	3.21	0.88	4.3	2.05	-335	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO41-PZM036 DATE 3/21/17

WELL DEPTH 51' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 13.83 WATER LEVEL END 13.84

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1304	11.26	15.95	2.29	5.66	614	1.47	-311	
1309	11.17	16.18	2.29	2.07	101	1.46	-322	
1314	11.18	16.29	2.28	1.37	74.3	1.46	-302	
1319	11.18	16.42	2.29	1.20	70.6	1.46	-308	
1324	11.18	16.70	2.27	1.01	65.1	1.45	-327	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT RI WELL NO. COH1-PZM001 DATE 3/21/17

WELL DEPTH 16' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 12.98 WATER LEVEL END 13.02

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1337	8.68	17.52	1.01	4.34	5.2	0.647	-191	
1342	8.35	17.51	1.03	1.08	8.1	0.658	-203	
1347	8.22	17.52	1.05	0.86	3.0	0.676	-218	
1352	8.18	17.57	1.07	1.19	2.4	0.684	-218	
1357	8.17	17.52	1.08	1.63	1.5	0.689	-225	
1402	8.15	17.69	1.07	1.96	0.5	0.687	-231	
1407	8.14	17.61	1.07	2.16	0.0	0.687	-236	
1410	8.13	17.76	1.07	2.19	0.0	0.684	-235	xsample

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. C002-P2M006 DATE 3/21/18

WELL DEPTH 19' SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 15.38 WATER LEVEL END 15.36

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1439	7.66	20.24	1.68	9.52	4.5	1.07	-167	
1444	7.62	20.66	1.67	7.94	0.0	1.07	-238	
1449	7.62	20.78	1.66	7.75	0.0	1.06	-259	
1454	7.63	20.91	1.66	7.25	0.0	1.06	-270	
1459	7.63	20.97	1.64	6.94	0.0	1.05	-276	
1504	7.63	21.16	1.61	6.53	0.0	1.03	-283	
1507	7.63	21.16	1.62	6.40	0.0	1.04	-285	
1510	7.63	21.17	1.63	6.34	0.0	1.04	-286	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO18-PZM006 DATE 3/21/17

WELL DEPTH _____ SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 12.38 WATER LEVEL END 12.47

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1532	6.88	20.48	1.71	2.32	6.4	1.09	-158	
1537	6.78	19.63	1.74	1.62	5.4	1.11	-150	
1542	6.77	19.31	1.75	1.43	10.9	1.12	-149	
1547	6.78	18.70	1.76	1.34	14.5	1.13	-148	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO36-PZM008 DATE 3/20/17

WELL DEPTH 14' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 7.34 WATER LEVEL END 8.44

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1018	10.96	17.49	1.50	4.16	12.2	0.963	27	
1023	11.02	15.99	1.54	4.85	10.0	0.985	-38	
1028	11.04	14.94	1.53	4.89	9.0	0.976	-72	
1033	11.04	14.26	1.55	5.11	9.0	0.993	-85	
1038	11.05	14.00	1.57	5.11	6.6	1.00	-92	
1043	11.06	13.68	1.59	5.18	4.4	1.02	-98	sample

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT QR WELL NO. ~~30~~ CO36-P2M043 DATE 3/20/17

WELL DEPTH 52' SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 7.84 WATER LEVEL END 7.98

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1059	11.40	14.43	3.19	4.14	2.6	2.04	-113	
1104	11.42	14.49	3.38	1.16	1.6	2.17	-181	
1109	11.42	14.50	3.43	0.93	0.4	2.19	-210	
1114	11.37	14.54	3.24	0.77	0.6	2.07	-231	
1119	11.39	14.64	3.17	0.71	0.7	2.03	-226	
1124	11.48	14.78	3.12	0.66	0.3	2.00	-245	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. C038-P2M006 DATE 3/20/17

WELL DEPTH 16' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 6.82 WATER LEVEL END 6.79

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1213	9.94	14.93	2.34	7.40	17.2	1.50	-186	
1218	9.78	14.48	2.35	5.73	7.0	1.50	-226	
1223	9.78	14.59	2.34	5.22	8.0	1.50	-237	
1228	9.77	14.58	2.34	4.84	10.8	1.50	-247	
1233	9.77	14.68	2.34	4.50	9.2	1.50	-255	
1238	9.75	15.05	2.32	4.29	7.7	1.48	-251	
1243	9.77	15.26	2.30	4.11	6.2	1.47	-249	
1246	9.74	15.05	2.31	4.08	6.3	1.48	-249	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q4 WELL NO. CO38-PZM043 DATE 3/20/17

WELL DEPTH 50' SCREEN DEPTH/LENGTH _____ WELL DIAMETER 2"

WATER LEVEL START 7.67 WATER LEVEL END 8.29

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1300	7.65	16.55	1.40	0.77	7.0	0.899	-85	
1305	7.24	16.51	1.40	0.71	5.5	0.894	-92	
1310	7.12	16.39	1.40	0.77	6.2	0.893	-87	
1315	7.11	16.29	1.40	0.80	6.0	0.894	-85	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q1 WELL NO. CO21-PZM046 DATE 3/20/17

WELL DEPTH 51' SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 9.05 WATER LEVEL END 8.76

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1336	8.03	16.87	1.55	2.85	2.0	0.997	-99	
1341	7.96	15.78	1.74	5.30	1.6	1.11	-192	
1346	7.93	15.31	1.80	6.01	3.6	1.15	-234	
1351	7.95	15.03	1.82	6.46	4.9	1.16	-257	
1356	8.01	14.82	1.81	6.61	11.3	1.16	-273	
1401	8.02	14.71	1.82	6.61	13.1	1.16	-282	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q7 WELL NO. C027-PZM012 DATE 3/20/17

WELL DEPTH 17.5' SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 4.77 WATER LEVEL END 4.79

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1416	10.91	14.77	2.52	5.54	1.6	1.61	-316	
1421	10.96	14.30	2.55	5.02	2.1	1.63	-304	
1426	10.97	14.23	2.56	4.80	2.9	1.64	-302	
1431	10.97	14.35	2.58	4.79	2.2	1.65	-302	
1436	10.97	14.41	2.58	4.71	2.9	1.65	-299	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

SITE CO PROJECT Q2 WELL NO C037-PZM038 DATE 3/20/17

WELL DEPTH 49' SCREEN DEPTH/LENGTH _____ WELL DIAMETER _____

WATER LEVEL START 12.45 WATER LEVEL END 12.57

Time (00:00)	PH (0.00)	TEMP (C)	Conductivity (mS/cm)	DO (mg/L)	TURB (NTU)	TDS (g/L)	ORP (mv)	Water Level Stop/Start
	+/- 0.2		+/- 3%	+/- 0.2			+/- 20	
1505	11.35	15.36	2.52	1.97	0.5	1.61	-270	
1510	11.28	15.55	2.51	1.06	0.4	1.61	-294	
1515	11.28	15.69	2.49	0.75	0.4	1.59	-306	
1520	11.28	15.81	2.51	0.63	0.4	1.61	-312	
1525	11.33	16.01	2.51	0.55	0.5	1.61	-317	

SAMPLING PERSONNEL _____

ADDITIONAL NOTES OR COMMENTS:

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW sampling	Project Number: 170384-1-[redacted]-2
Well Number: CO60-PZP001	Date: 6/12/17
Well Diameter (in): 2	One Well Volume (gal): –
Depth to Product (ft): –	QED Controller Settings: –
Depth to Water (ft): 15.00	Flow Rate (mL/min) 264.032
Product Thickness (ft): –	Length of time Purged (min) ~~good~~ 45
Depth to Bottom (ft): 19.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0819	0.31	15.00	23.6	10.73	1.811	1.09	197.3	90.4	
0824	0.62	15.00	24.4	10.76	1.790	0.48	94.8	11.3	
0829	0.93	15.00	24.7	10.79	1.792	0.41	65.8	7.6	
0834	1.24	15.00	24.8	10.79	1.787	0.37	76.5	6.9	
0839	1.55	15.00	25.1	10.82	1.781	0.33	73.8	10.2	
0844	1.86	15.00	25.3	10.83	1.754	0.38	32.3	4.6	
0849	2.17	15.00	25.6	10.83	1.714	0.39	167.8	2.6	
0854	2.48	15.00	25.9	10.82	1.706	0.39	111.0	1.9	
0859	2.79	15.00	25.9	10.83	1.704	0.39	93.4	4.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO60-PZP001	0902	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40 mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-~~3~~2
Well Number: CO26-PZM007	Date: 4/12/17
Well Diameter (in): –	One Well Volume (gal): –
Depth to Product (ft): –	QED Controller Settings: –
Depth to Water (ft): 15.70	Flow Rate (mL/min) 195.89
Product Thickness (ft): –	Length of time Purged (min) 40
Depth to Bottom (ft): ~~47~~ 47.40	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0915	0.23	15.00	23.2	8.16	10.628	3.88	145.5	16.9	
0920	0.46	15.00	23.3	7.99	11.048	3.35	152.7	9.7	
0925	0.69	15.00	23.7	7.94	11.971	2.10	177.6	43.2	
0930	0.92	15.00	23.4	7.62	13.065	1.05	179.2	6.6	
0935	1.15	15.00	24.00	7.56	13.375	0.53	177.6	4.9	
0940	1.38	15.00	23.8	7.54	13.450	0.42	177.1	4.0	
0945	1.61	15.00	23.8	7.53	13.455	0.30	176.1	10.6	
0950	1.84	15.00	23.8	7.53	13.447	0.30	175.8	3.5	
0955	2.07	15.00	23.9	7.53	13.442	0.29	174.1	3.6	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO26-PZM007	0957	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: RB

Comments: 3-40mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW Sampling	Project Number: 170384-1-~~2~~ 2
Well Number: C056 - P2P001	Date: 6/12/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 15.05	Flow Rate (mL/min) 264.032
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 19.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1022	~~15.05~~ 0.31	15.05	27.5	11.33	2.153	0.72	-42.0	4.6	
1027	0.62	15.05	27.1	11.33	2.135	0.56	-58.4	8.2	
1032	0.93	15.05	27.9	11.29	2.111	0.32	-92.8	13.2	
1037	1.24	15.05	27.9	11.29	2.098	0.20	-111.7	12.5	
1042	1.55	15.05	28.3	11.28	2.090	0.19	-115.4	13.0	
1047	1.86	15.05	28.2	11.29	2.085	0.20	-113.6	13.2	
1052	2.17	15.05	28.0	11.29	2.081	0.20	-113.1	14.6	
1057	2.48	15.05	27.9	11.30	2.078	0.18	-114.4	15.3	
1102	2.79	15.05	28.3	11.29	2.078	0.18	-114.8	11.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C056-P2P001	1104	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOA's VOC's

Casing Volume: 1" I.D. = 0.041 gal/ft - 2" I.D. = 0.163 gal/ft - 4" I.D. = 0.653 gal/ft - 6" I.D. = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW Sampling	Project Number: 170384-1-~~8~~ 2
Well Number: C058-PZM001	Date: 6/12/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 13.60	Flow Rate (mL/min) 264.03
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 19.50	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1118	0.31	13.60	27.7	10.42	1.225	1.33	-14.5	68.5	
1123	0.62	13.60	29.0	11.49	1.935	0.49	-95.4	82.7	
1128	0.93	13.60	29.4	10.99	1.765	0.44	-88.4	106.8	
1133	1.24	13.60	29.6	10.77	1.461	0.42	-78.3	25.8	
1138	1.55	13.60	29.7	10.23	1.257	0.32	-54.8	35.6	
1143	1.86	13.60	29.4	10.32	1.268	0.32	-53.8	27.8	
1148	2.17	13.60	29.8	10.65	1.336	0.25	-74.9	59.5	
1153	~~2.48~~ 2.48	13.60	29.8	10.71	1.335	0.23	-81.8	36.4	
1158	2.79	13.61	30.1	10.82	1.380	0.22	-86.8	~~35~~ 35.2	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C058-PZM001	1202	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOAs VOCs

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven Gas Sampling	Project Number: 170394-1-~~3~~ 2
Well Number: C055-PZM000	Date: 6/12/17
Well Diameter (in): 2	One Well Volume (gal): –
Depth to Product (ft): –	QED Controller Settings: —
Depth to Water (ft): 14.20	Flow Rate (mL/min) 210.090
Product Thickness (ft): –	Length of time Purged (min) 40
Depth to Bottom (ft): 17.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1234	0.31	14.20	26.9	11.96	3.004	1.00	-50.0	6503.0	
1239	0.61	15.50	29.0	11.88	2.825	1.67	-71.6	3131.0	
1244	0.84	15.80	31.20	11.82	2.773	1.74	-74.6	1089.1	
1249	1.07	15.80	32.3	11.79	2.741	1.87	-75.3	957.5	
1254	1.30	15.95	34.4	11.72	2.665	1.98	-71.3	642	
1259	1.53	16.10	35.2	11.69	2.637	2.05	-69.6	52.1	
1304	1.76	16.10	36.8	11.60	2.560	2.25	-63.5	54.00	
1309	1.99	16.35	37.6	11.58	2.519	2.32	-62.0	348.0	
1314	2.22	16.35	37.9	11.57	2.512	2.38	-62.1	92.0	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C055-PZM000	1314	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL voa's VOC's Went Dry on last VOC

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-6
Well Number: C059-PZP002	Date: 6/12/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 15.85	Flow Rate (mL/min) 264.03
Product Thickness (ft): —	Length of time Purged (min) 210
Depth to Bottom (ft): 19.00	Condition of Pad/Cover: good good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1346	0.31	15.85	25.0	11.24	2.195	1.52	4.0	53.3	
1351	0.62	15.85	24.5	11.56	2.200	1.00	-11.4	49.4	
1356	0.93	15.85	25.7	11.68	2.388	1.09	-26.8	51.1	
1401	1.24	15.85	25.9	11.69	2.427	1.25	-31.2	52.6	
1406	1.55	15.90	25.4	11.67	2.333	1.46	-28.5	57.4	
1410	1.86	15.90	25.6	11.65	2.300	1.42	-26.5	57.1	
1416	2.17	15.90	25.9	11.64	2.280	1.25	-20.1	60.6	
~~1420~~ 1421	2.48	15.90	25.7	11.64	2.294	1.25	-18.0	65.2	
~~1426~~ 1426	2.79	15.90	25.6	11.66	2.312	1.27	-17.0	67.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C059-PZP002	1428	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW Sampling	Project Number: 170384-1-~~2~~ 2
Well Number: Co 24 - PZM007	Date: 6/12/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 14.0	Flow Rate (mL/min) 264.032
Product Thickness (ft): —	Length of time Purged (min) ~~3~~ 40
Depth to Bottom (ft): 22.0	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1445	0.31	14.0	23.5	9.46	0.748	0.99	102.0	29.7	
1450	0.62	14.55	23.1	9.49	0.818	0.67	95.50	22.8	
1455	0.93	14.55	24.4	9.57	1.197	0.28	30.4	24.8	
1500	1.24	14.60	24.0	9.58	1.315	0.26	14.7	20.5	
1505	1.55	14.60	24.5	9.58	1.547	0.18	-34.4	12.5	
1510	1.86	14.60	23.5	9.57	1.709	0.15	-63.8	9.0	
1515	2.17	14.60	23.7	9.55	1.760	0.14	-75.9	7.9	
1520	2.48	14.60	22.9	9.58	1.865	0.14	-95.2	7.2	
1525	2.79	14.60	23.2	9.58	1.883	0.14	-107.5	6.9	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
Co 24-PZM007	1527	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40 mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-2
Well Number: C057-PZP002	Date: 6/13/17
Well Diameter (in): –	One Well Volume (gal): –
Depth to Product (ft): –	QED Controller Settings: –
Depth to Water (ft): 15.20	Flow Rate (mL/min) 195.90
Product Thickness (ft): –	Length of time Purged (min) 40
Depth to Bottom (ft): 18.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0727	0.23	15.20	21.3	11.83	1.832	1.53	93.0	9.1	
0732	0.46	15.25	22.2	11.82	1.840	1.38	185.7	6.3	
0737	0.69	15.25	23.1	11.88	1.882	1.26	150.6	7.1	
0742	0.92	15.25	23.2	11.89	1.920	1.22	94.2	5.6	
0747	1.15	15.25	23.4	11.93	1.974	1.04	68.2	4.9	
0752	1.38	15.25	23.9	11.94	2.007	0.98	59.9	2.8	
0757	1.61	15.25	23.9	11.96	2.048	0.94	34.5	2.7	
0802	1.84	15.25	24.4	11.97	2.075	0.92	19.9	2.0	
0807	2.07	15.25	24.6	11.97	2.074	0.93	17.2	2.0	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C057-PZP002	0810	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3- 40mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven Gw Sampling	Project Number: 170384-1-2
Well Number: C002-PZM006	Date: 6/13/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 14.50	Flow Rate (mL/min) 218.60
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 19.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0840	0.31	14.50	24.2	7.83	1.257	0.51	-74.6	2.1	
0845	0.62	14.50	24.3	7.77	1.252	0.28	-112.3	2.2	
0850	0.85	14.50	25.7	7.80	1.248	0.13	-121.5	2.4	
0855	1.08	14.50	26.6	7.80	1.250	0.13	-128.8	2.6	
0900	1.31	14.50	27.1	7.80	1.250	0.11	-140.3	2.6	
0905	1.62	14.50	27.3	7.79	1.252	0.08	-148.8	3.3	
0910	1.85	14.50	27.4	7.78	1.250	0.09	-167.4	3.7	
0915	2.08	14.52	27.5	7.77	1.252	0.08	-169.5	3.8	
0920	2.31	14.52	28.0	7.77	1.248	0.09	-173.5	4.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C002-PZM006	0924	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL Voa's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW sampling	Project Number: 170384-1-2
Well Number: C093- P2MXXX	Date: 6/13/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 10.4	Flow Rate (mL/min) 245.10
Product Thickness (ft): —	Length of time Purged (min)
Depth to Bottom (ft): 20.01	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0952	0.27	10.60	26.4	11.49	1.904	0.14	-293.1	72.1	
0957	0.54	10.45	26.9	11.53	1.955	0.06	-371.0	60.0	
1002	0.81	10.45	27.3	11.60	2.013	0.02	-359.2	90.4	
1007	1.08	10.45	27.2	11.63	2.032	0.01	-356.7	114.9	
1012	1.35	10.50	26.9	11.66	2.029	0.00	-377.0	265.0	
1017	1.64	10.50	27.2	11.65	2.025	0.00	-369.4	304.0	
1022	1.97	10.50	28.2	11.64	2.032	0.01	-379.3	174.0	
1027	2.28	10.50	27.8	11.66	2.027	0.01	-369.3	784.3	
1032	2.59	10.50	28.2	11.65	2.032	0.01	-369.5	1346.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C093-P2MXXX	1035	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL Voa's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW Sampling	Project Number: 170384-1-2
Well Number: C018-PZM006	Date: 6/13/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 12.00	Flow Rate (mL/min) ~~2.34~~ 264.03
Product Thickness (ft): -	Length of time Purged (min) 40
Depth to Bottom (ft): 20.00	Condition of Pad/Cover: OK / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1111	0.31	12.00	29.4	6.42	1.790	0.56	-101.6	505.3	
1116	0.62	12.80	29.5	6.37	1.778	0.54	-96.0	648.9	
1121	0.93	12.80	31.9	6.38	1.765	0.55	-92.4	67.7	
1126	1.24	12.80	32.6	6.38	1.772	0.58	-91.0	42.1	
1131	1.55	12.80	32.8	6.38	1.779	0.63	-89.7	42.4	
1137	1.86	12.80	32.9	6.37	1.774	0.64	-89.2	46.2	
1141	2.17	12.80	32.7	6.36	1.776	0.71	-87.6	49.3	
1147	2.48	12.80	33.1	6.36	1.772	0.75	-87.4	43.8	
1152	2.79	12.80	33.3	6.36	1.770	0.76	-87.4	44.9	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C018-PZM006	1155	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40 mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW Sampling	Project Number: 170384-1-2
Well Number: CO101-P2MXXX	Date: 6/13/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 12.70	Flow Rate (mL/min) 229.96
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 20.5	Condition of Pad/Cover: OK / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1233	0.27	12.70	21.7	9.06	1.334	0.77	-142.1	7.2	
1238	0.58	13.20	21.7	9.12	1.322	0.33	-167.5	6.3	
1243	0.85	13.20	23.2	9.28	1.322	0.29	-171.1	5.8	
1248	1.12	14.25	23.5	9.40	1.324	0.14	-180.0	5.3	
1253	1.39	14.30	25.1	9.35	1.322	0.16	-169.0	6.4	
1258	1.66	14.30	25.9	9.49	1.323	0.05	-165.0	5.6	
1303	1.93	14.60	26.4	9.63	1.324	0.05	-166.1	5.7	
1308	2.20	14.60	26.4	9.64	1.324	0.04	-167.8	5.6	
1313	2.43	14.60	26.2	9.88	1.318	0.05	-170.2	5.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO101-P2MXXX	1316	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOAs VOCs

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW Sampling	Project Number: 170384-1-2
Well Number: CO30-P2M15	Date: 6/13/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 12.00	Flow Rate (mL/min) 264.05
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 27.5	Condition of Pad/Cover: OK / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1345	0.31	12.00	25.0	11.84	2.552	0.94	-189.2	12.2	
1350	0.62	12.00	24.8	11.92	2.544	0.42	-209.1	6.0	
1355	0.93	12.00	24.0	11.99	2.542	0.29	-215.3	7.1	
1400	1.24	12.00	24.7	12.01	2.542	0.25	-215.8	5.1	
1405	1.55	12.00	24.1	12.04	2.551	0.21	-225.2	5.9	
1410	1.86	12.00	24.4	12.05	2.548	0.19	-226.0	8.1	
1415	2.17	12.00	24.5	12.05	2.546	0.18	-227.6	5.3	
1420	2.48	12.00	25.2	12.05	2.542	0.18	-229.5	7.8	
1425	2.79	12.00	25.4	12.04	2.543	0.17	-224.0	7.5	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO30-P2M15	1428	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 4-30mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-2
Well Number: CO30-PZM60	Date: 6/13/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 13.75	Flow Rate (mL/min) 229.96
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 72	Condition of Pad/Cover: OKe / OKe

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1445	0.27	13.75	23.8	7.78	5.043	4.55	95.5	4.4	
1450	0.54	13.75	23.6	7.67	5.045	4.45	96.0	4.6	
1455	0.81	13.75	23.3	7.04	6.369	0.64	-109.7	21.7	
1500	~~1.08~~ 1.08	13.75	23.2	7.05	6.891	0.36	-137.9	7.9	
1505	1.35	13.75	23.4	7.06	7.172	0.25	-143.6	5.7	
1510	1.62	13.85	23.2	7.05	7.338	0.54	-134.0	4.8	
1515	1.89	13.85	23.5	7.11	7.936	0.21	-156.4	3.9	
1520	2.16	13.85	23.3	7.14	8.215	0.17	-162.7	3.8	
1525	2.43	13.85	23.3	7.15	8.414	0.16	-165.2	3.9	
~~1530~~									

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO30-PZM60	1530	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments:
3-40mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____ gal/ft = _____ (gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GWS Sampling	Project Number: 170384-1-2
Well Number: Co104-PZMxxx	Date: 6/14/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 13.15	Flow Rate (mL/min) 237.57
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 19.0	Condition of Pad/Cover: ok / ok

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0748	0.31	13.15	23.8	10.17	6.750	3.84	131.1	1400	
0753	0.62	13.60	23.3	10.13	6.470	3.92	107.7	966.1	
0758	0.89	13.90	24.3	9.86	5.859	4.56	106.9	117.4	
0803	1.16	13.60	24.2	9.70	5.600	4.41	101.9	56.2	
0808	1.43	13.60	24.1	9.67	5.607	4.32	98.8	41.2	
0813	1.70	13.60	24.1	9.56	5.564	4.12	92.4	19.9	
0818	1.97	13.60	24.3	9.53	5.562	4.02	90.9	16.6	
0823	2.24	13.65	24.4	9.50	5.560	3.93	86.3	14.2	
0828	2.51	13.65	24.5	9.49	5.565	3.91	85.2	11.2	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
Co 104-PZMxxx	0830	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL Voa's Voc's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ ft x _____ gal/ft = _____ (gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW Sampling	Project Number: 170384-1-2
Well Number: Co103 - PZM xxx	Date: 6/14/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): —	QED Controller Settings:
Depth to Water (ft): 13.15	Flow Rate (mL/min) 264.03
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 20.5	Condition of Pad/Cover: OK / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0845	0.31	13.20	21.4	12.24	4.344	1.38	-151.5	6.2	
0850	0.62	13.20	21.0	12.29	4.247	0.52	-187.6	8.0	
0855	0.93	13.20	20.9	12.32	4.065	0.35	-201.9	15.7	
0900	1.24	13.20	20.8	12.34	4.022	0.26	-210.2	23.8	
0905	1.55	13.20	20.6	12.36	3.999	0.23	-215.7	26.8	
0910	1.86	13.20	20.9	12.35	3.984	0.19	-224.4	35.7	
0915	2.17	13.25	20.7	12.36	3.921	0.18	-224.2	42.5	
0920	2.48	13.25	20.4	12.37	3.904	0.16	-231.3	45.2	
0925	2.79	13.25	20.9	12.35	3.880	0.16	-232.5	47.5	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
Co103 - PZM xxx	0930	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____ gal/ft = _____(gal)

Low Flow Sampling Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven gw samples	Project Number: 170384-1-2
Well Number: CO102-PZMxxx	Date: 6/14/17
Well Diameter (in): 7	One Well Volume (gal): –
Depth to Product (ft): –	QED Controller Settings: –
Depth to Water (ft): 12.50	Flow Rate (mL/min) 273.69
Product Thickness (ft): –	Length of time Purged (min) 30
Depth to Bottom (ft): 19.5	Condition of Pad/Cover: OK / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0940	0.31	12.50	25.1	11.83	1.867	1.72	-156.5	113.5	
0945	0.62	12.50	23.0	11.82	1.822	0.92	-177.4	58.5	
0950	0.93	12.50	21.3	11.82	1.836	0.45	-201.6	8.6	
0955	1.24	12.50	21.1	11.83	1.838	0.34	-205.6	5.4	
1000	1.55	12.50	21.1	11.83	1.838	0.33	-207.3	4.7	
1005	1.86	12.50	21.2	11.82	1.836	0.24	-213.2	3.2	
1010	2.17	12.50	21.8	11.80	1.836	0.20	-216.2	2.0	
~~1015~~									
~~1020~~									

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO102-PZMxxx	1015	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____ gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW sampling	Project Number: 170384-1-2
Well Number: C041-PZM036	Date: 6/14/17
Well Diameter (in): 2	One Well Volume (gal): –
Depth to Product (ft): –	QED Controller Settings: –
Depth to Water (ft): 13.70	Flow Rate (mL/min) 264.03
Product Thickness (ft): –	Length of time Purged (min)
Depth to Bottom (ft): 51.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1050	0.31	13.70	26.3	10.97	2.168	0.25	-246.5	7.8	
1055	0.62	13.70	26.0	10.96	2.165	0.09	-290.0	34.1	
1100	0.93	13.70	25.9	10.96	2.164	0.09	-296.0	43.8	
1105	1.24	13.70	26.3	10.96	2.162	0.10	-289.6	97.0	
1110	1.55	13.70	26.3	10.96	2.165	0.10	-290.4	104.1	
1115	1.86	13.70	26.3	10.96	2.162	0.10	-294.8	36.8	
1120	2.17	13.70	26.5	10.95	2.161	0.09	-294.5	46.7	
1125	2.48	13.70	27.0	10.94	2.159	0.09	-296.4	39.8	
1130	2.79	13.70	26.90	10.94	2.162	0.08	-289.3	39.1	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C041-PZM036	1135	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40 mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW Sampling	Project Number: 170384-1-2
Well Number: C041-PZM001	Date: 6/14/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft):	QED Controller Settings:
Depth to Water (ft): 12.50	Flow Rate (mL/min) 264.03
Product Thickness (ft):	Length of time Purged (min) 40
Depth to Bottom (ft): 16.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1150	0.31	12.50	27.6	7.89	1.245	0.82	-69.0	4.7	
1155	0.62	12.55	27.7	7.81	1.242	0.64	-72.5	4.4	
1200	0.93	12.55	28.6	7.64	1.237	0.40	-86.7	1.3	
1205	1.24	12.55	28.5	7.63	1.238	0.41	-85.8	1.7	
1210	1.55	12.55	28.6	7.63	1.235	0.35	-92.6	0.9	
1215	1.86	12.55	28.5	7.63	1.229	0.32	-113.9	0.5	
1220	2.17	12.55	28.9	7.63	1.227	0.32	-114.9	0.4	
1225	2.48	12.60	28.4	7.64	1.224	0.28	-129.2	0.4	
1230	2.79	12.61	28.2	7.64	1.219	0.28	-132.0	0.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C041-PZM001	1235	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOA's VOCs

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____ gal/ft = _____ (gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW sampling	Project Number: 170384-1-2
Well Number: C036-PZM043	Date: 6/14/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 7.20	Flow Rate (mL/min) 264.03
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 52.0	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1310	0.31	7.40	24.9	11.75	2.819	1.48	-288.0	2.4	
1315	0.62	7.40	24.3	11.83	3.036	1.14	-299.2	2.0	
1320	0.93	7.40	25.1	11.92	3.146	0.44	-343.9	8.1	
1325	1.24	7.40	25.8	11.96	3.193	0.34	-364.6	15.7	
1330	1.55	7.40	25.9	11.98	3.248	0.30	-369.5	21.4	
1335	1.86	7.40	25.6	11.99	3.273	0.27	-375.1	28.9	
1340	2.17	7.40	25.8	11.99	3.265	0.26	-375.3	30.3	
1345	2.48	7.40	26.1	11.99	3.275	0.26	-376.6	18.8	
1350	2.79	7.40	26.4	11.98	3.274	0.26	-374.2	21.8	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C036-PZM043	1355	TCL-VOCs	3 - 40 mL VOA	HCl	✓
		TPH-GRO	3 - 40 mL VOA	HCl	✓
		TPH-DRO	2 - 1 L Amber	none	✓
		TCL-SVOCs	2- 1 L Amber	none	✓
		Oil & Grease	2- 1 L Amber	HCl	✓
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	✓
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	✓
		Total Cyanide	1 - 250 mL Plastic	NaOH	✓
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	✓
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	✓
		PCB	2 - 1 L Amber	None	✓
Matrix Spike					✓
Duplicate					✓

Sampled By: BB

Comments: 3-40mL VOAs VOCs

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____ gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-2
Well Number: C036-PZM008	Date: 6/14/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 6.60	Flow Rate (mL/min) 229.96
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 14.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1357	0.27	6.60	25.1	11.83	1.743	0.81	-203.4	13.1	
1402	0.54	6.70	24.6	11.81	1.726	0.50	-208.4	9.5	
1407	0.81	6.70	24.5	11.83	1.734	0.47	-210.6	5.9	
1412	1.08	6.75	25.4	11.83	1.656	0.32	-203.6	10.6	
1417	1.35	6.80	25.5	11.70	1.585	0.29	-199.1	9.8	
1422	1.62	6.80	25.2	11.67	1.539	0.25	-195.5	13.9	
1427	1.89	6.80	25.2	11.65	1.500	0.26	-189.6	13.3	
1432	2.16	6.80	25.6	11.62	1.491	0.27	-185.6	15.4	
1437	2.43	6.80	25.7	11.62	1.493	0.27	-188.5	14.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C036-PZM008	1440	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40 mL Voa's Voc's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-2
Well Number: CO40-PZM008	Date: 6/14/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 6.65	Flow Rate (mL/min)
Product Thickness (ft): —	Length of time Purged (min)
Depth to Bottom (ft): 18.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1505	0.31	6.65	23.2	7.65	3.645	0.85	-137.5	7.8	
1510	0.62	6.95	23.3	7.59	3.640	0.57	-142.0	8.3	
1515	0.93	6.95	25.6	7.46	3.656	0.39	-126.0	10.5	
1520	1.24	6.95	26.5	7.44	3.664	0.32	-111.6	12.9	
1525	1.55	6.95	26.1	7.38	3.642	0.26	-93.8	14.2	
1530	1.86	7.00	25.8	7.36	3.614	0.24	-97.5	14.5	
1535	2.17	7.00	25.8	7.34	3.594	0.24	-100.7	14.9	
1540	2.48	7.00	26.1	7.35	3.565	0.21	-83.2	17.4	
1545	2.79	7.00	26.1	7.36	3.550	0.20	-87.8	19.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO40-PZM008	1548	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW sampling	Project Number: 170384-1-2
Well Number: C038-PZM006	Date: 6/15/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 6.40	Flow Rate (mL/min) 264.03
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 16	Condition of Pad/Cover: OK / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0750	0.31	6.40	19.7	10.35	2.437	1.30	-242.0	22.7	
0755	0.62	6.40	19.6	10.35	2.443	0.68	-259.6	10.4	
0800	0.93	6.40	19.7	10.36	2.430	0.48	-271.9	4.2	
0805	1.24	6.40	19.7	10.33	2.420	0.39	-276.5	5.6	
0810	1.55	6.40	19.7	10.26	2.388	0.31	-279.5	4.0	
0815	1.86	6.40	19.7	10.26	2.373	0.30	-281.0	4.7	
0820	2.17	6.40	19.8	10.27	2.372	0.27	-284.1	6.6	
0825	2.48	6.40	20.0	10.24	2.355	0.23	-285.6	6.0	
0830	2.79	6.40	20.0	10.25	2.352	0.18	-285.2	5.8	
~~0835~~									

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C038-PZM006	0835	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40 mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-2
Well Number: CO38-P2M043	Date: 6/15/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 7.20	Flow Rate (mL/min) 264.03
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 50.0	Condition of Pad/Cover: OK / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0840	0.31	7.20	19.2	7.69	1.425	1.36	-187.1	0.9	
0845	0.62	7.50	19.3	7.49	1.414	0.61	-178.3	0.9	
0850	0.93	7.55	20.4	7.39	1.405	0.44	-170.9	0.9	
0855	1.24	7.55	20.4	7.39	1.404	0.39	-167.4	1.0	
0900	1.55	7.55	20.8	7.39	1.405	0.37	-161.0	1.2	
0905	1.86	7.55	20.8	7.39	1.405	0.37	-155.9	1.4	
0910	2.17	7.55	20.9	7.39	1.404	0.36	-157.4	1.7	
0915	2.48	7.55	21.4	7.39	1.403	0.36	-156.5	2.1	
0920	2.79	7.55	21.4	7.38	1.404	0.36	-156.4	2.1	
0									

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO38-P2M043	0925	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL Voa's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-2
Well Number: C027-PZM012	Date: 6/15/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): —	QED Controller Settings:
Depth to Water (ft): 4.60	Flow Rate (mL/min) 264.03
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 17.5	Condition of Pad/Cover: OK / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0940	0.31	4.60	19.3	11.27	1.982	0.47	-270.8	1.2	
0945	0.62	4.60	19.3	11.25	1.985	0.44	-292.5	1.2	
0950	0.93	4.60	19.0	11.27	1.984	0.28	-313.7	1.8	
0955	1.24	4.60	19.1	11.30	1.965	0.22	-320.6	3.2	
1000	1.55	4.60	18.9	11.33	1.961	0.20	-322.3	4.3	
1005	1.86	4.60	18.9	11.33	1.966	0.21	-321.4	4.5	
1010	2.17	4.60	18.7	11.36	1.961	0.19	-322.6	12.2	
1015	2.48	4.60	18.5	11.37	1.961	0.18	-322.8	18.7	
1020	2.79	4.60	18.1	11.38	1.962	0.18	-323.4	14.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C027PZM012	1025	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOA's VOC'S

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____ gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-2
Well Number: C027-P2M046	Date: 6/15/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): —	QED Controller Settings:
Depth to Water (ft): 7.50	Flow Rate (mL/min) 273.80
Product Thickness (ft): —	Length of time Purged (min) 30
Depth to Bottom (ft): 57.00	Condition of Pad/Cover: OK / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1032	0.31	7.50	19.3	8.26	1.094	0.66	-256.0	4.9	
1037	0.62	7.80	19.4	8.01	1.077	0.33	-266.5	5.7	
1042	0.93	7.80	20.3	7.96	1.073	0.15	-279.9	4.6	
1047	1.24	7.80	20.8	7.98	1.072	0.08	-294.4	3.6	
1052	1.55	7.85	21.1	7.98	1.071	0.09	-299.5	3.3	
1057	1.86	7.95	21.3	7.95	1.070	0.08	-296.0	3.5	
1102	2.17	7.92	21.3	7.92	1.071	0.11	-291.6	3.3	
~~1107~~									
~~1112~~									

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C027-P2M046	1105	TCL-VOCs	3 - 40 mL VOA	HCl	✓
		TPH-GRO	3 - 40 mL VOA	HCl	✓
		TPH-DRO	2 - 1 L Amber	none	✓
		TCL-SVOCs	2- 1 L Amber	none	✓
		Oil & Grease	2- 1 L Amber	HCl	✓
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	✓
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	✓
		Total Cyanide	1 - 250 mL Plastic	NaOH	✓
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	✓
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	✓
		PCB	2 - 1 L Amber	None	✓
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-2
Well Number: C039-P2M007	Date: 6/15/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): —	QED Controller Settings: —
Depth to Water (ft): 6.80	Flow Rate (mL/min) 264.03
Product Thickness (ft): —	Length of time Purged (min) 40
Depth to Bottom (ft): 18.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1130	0.31	6.80	21.3	10.80	3.891	0.77	-291.9	3.6	
1135 "	0.62	7.10	21.0	10.83	3.886	0.58	-294.9	3.0	
1140 "	0.93	7.00	23.2	10.81	3.867	0.38	-310.6	4.1	
1145 "	1.24	7.00	23.2	10.81	3.875	0.38	-308.3	4.8	
1150 "	1.55	7.00	23.1	10.80	3.866	0.22	-315.3	3.8	
1155 "	1.86	7.00	23.2	10.79	3.868	0.24	-317.9	4.0	
1200 "	2.17	7.00	23.6	10.72	3.882	0.20	-321.5	6.8	
1205 "	2.48	7.00	23.7	10.71	3.890	0.18	-319.1	5.4	
1210 "	2.79	7.00	23.6	10.71	3.981	0.18	-323.1	3.6	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C039-P2M007	1215	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384/-1-2
Well Number: C039-P2M042	Date: 6/15/17
Well Diameter (in): 2	One Well Volume (gal): –
Depth to Product (ft): –	QED Controller Settings: –
Depth to Water (ft): 8.10	Flow Rate (mL/min) 252.67
Product Thickness (ft): –	Length of time Purged (min) 40
Depth to Bottom (ft): 47.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1220	0.31	8.15	20.2	11.62	2.526	0.54	-336.2	2.2	
1225	0.62	8.15	20.0	11.62	2.520	0.46	-336.1	3.0	
1230	0.93	8.15	21.3	11.58	2.502	0.31	-340.2	2.8	
1235	1.24	8.15	21.8	11.57	2.497	0.17	-350.3	1.3	
1240	1.55	8.15	21.7	11.57	2.493	0.16	-364.3	1.9	
1245	1.86	8.15	21.3	11.58	2.487	0.14	-354.9	0.9	
1250	2.13	8.15	21.3	11.58	2.484	0.10	-370.8	1.8	
1255	2.40	8.15	21.2	11.58	2.484	0.15	-357.8	1.2	
1300	2.67	8.15	21.7	11.58	2.483	0.12	-369.1	1.5	
~~1305~~									

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C039-P2M042	1305	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL VOA's VOC's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven GW Sampling	Project Number: 170384-1-2
Well Number: C037- PZM038	Date: 6/15/17
Well Diameter (in): 2	One Well Volume (gal): –
Depth to Product (ft): –	QED Controller Settings: –
Depth to Water (ft): 12.35	Flow Rate (mL/min) 255.51
Product Thickness (ft): –	Length of time Purged (min) 40
Depth to Bottom (ft): 49.00	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1325	0.27	12.30	23.0	11.89	2.340	0.35	-327.3	1.4	
1330	0.54	12.30	23.6	11.89	2.340	0.13	-364.4	2.2	
1335	0.81	12.30	22.6	11.92	2.333	0.18	-353.9	1.3	
1340	1.08	12.30	22.5	11.93	2.335	0.11	-389.0	0.9	
1345	1.35	12.30	22.4	11.93	2.341	0.11	-384.1	1.0	
1350	1.62	12.30	23.0	11.91	2.327	0.13	-367.7	1.2	
1355	1.89	12.30	23.1	11.91	2.328	0.11	-374.2	1.0	
1400	2.16	12.30	23.2	11.90	2.334	0.09	-417.8	2.8	
1405	2.43	12.30	22.3	11.93	2.336	0.10	-406.1	3.6	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C037-PZM038	1410	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BG

Comments: 3-40mL Voa's Voc's

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven GW Sampling	Project Number: 170384-1-2
Well Number: CO-42 PZM 004	Date: 6/15/17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): –	QED Controller Settings: —
Depth to Water (ft): 7.90	Flow Rate (mL/min) 264.03
Product Thickness (ft): –	Length of time Purged (min) 40
Depth to Bottom (ft): 16.50	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1435	0.31	7.90	22.2	8.56	1.438	0.99	-178.4	2.5	
1440	0.62	8.00	22.1	8.52	1.436	0.82	-183.2	2.4	
1445	0.93	8.00	22.4	8.45	1.434	0.50	-185.3	2.3	
1450	1.24	8.00	22.0	8.42	1.433	0.44	-191.2	2.3	
1500	1.55	8.00	22.5	8.44	1.432	0.32	-194.5	3.0	
1505	1.86	8.30	23.9	8.36	1.435	0.25	-184.5	7.1	
1510	2.17	8.45	23.6	8.31	1.436	0.23	-188.5	7.4	
1515	2.48	8.45	23.8	8.20	1.437	0.24	-187.2	4.0	
1520	2.79	8.47	23.6	8.07	1.436	0.24	-185.3	5.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO42-PZM004	1525	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: BB

Comments: 3-40mL Voa's VOC'S

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ ft x _____ gal/ft = _____ (gal)

Low Flow Sampling Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: C024-PZM007	Date: 9/14/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 14.38	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 22.20	Condition of Pad/Cover: 3% pung / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1417	0	14.38	29.50	8.94	1.49	0.00	10	1000	very slightly turbid
1422	0.2		29.12	9.25	1.43	0.00	-45	401	
1427	0.4		28.73	9.27	1.53	0.00	-97	312	
1432	0.6		28.41	9.24	1.64	0.00	-126	147	
1437	0.8		28.25	9.21	1.74	0.00	-145	113	
1442	1.0		28.09	9.20	1.78	0.00	-153	42.3	
1447	1.2		27.90	9.18	1.81	0.00	-158	31.6	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C024-PZM007	1452	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO23-PZM008	Date: 9/14/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 14.71	Flow Rate (mL/min) 210
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 22.18	Condition of Pad/Cover: not sloping / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1326	0.1	14.71	29.95	10.98	2.97	0.00	-210	718	
1331	0.3	14.71	29.75	10.91	2.82	0.00	-278	636	
1336	0.5	14.71	29.62	10.92	2.74	0.00	-249	405	
1341	0.7	14.71	29.43	10.86	2.15	0.00	-245	322	
1346	0.9	14.71	29.29	10.80	1.84	0.00	-235	280	
1351	1.1	14.71	29.23	10.80	1.71	0.00	-215	237	
1356	1.3	14.71	29.13	10.79	1.65	0.00	-217	172	
1401	1.6	14.71	29.03	10.78	1.62	0.00	-223	103	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO23-PZM008	1406	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: C059-PZP002	Date: 9/14/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 15.01	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 19.12	Condition of Pad/Cover: / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1244	0	15.01	28.96	11.31	2.49	0.00	-76	41.9	
1249	0.2	15.91	28.99	11.32	2.41	0.00	-102	7.1	Δ flow
1254	0.3	15.82	28.95	11.22	2.32	0.00	-102	2.6	
1259	0.4	15.74	28.93	11.19	2.30	0.00	-104	1.2	
1304	0.5	15.66	28.93	11.24	2.36	0.00	-107	1.1	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C059-PZP002	1309	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: CMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: C056-PZP001	Date: 9/14/19
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 14.98	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 19.09	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1210	0	14.98	29.95	9.94	1.69	0.23	-43	140	
1215	0.2	14.98	29.74	10.99	1.76	0.00	-147	54.5	
1220	0.4	14.98	29.11	10.98	1.79	0.00	-153	6.0	
1225	0.6	14.98	28.74	10.98	1.81	0.00	-155	3.1	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C056-PZP001	1230	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: C055-PZM000	Date: 9/14/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 14.11	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 17.18	Condition of Pad/Cover: not sloping / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1053	0	14.11	26.64	11.86	2.76	0.00	-96	457	
1058	0.2	14.11	26.51	11.91	2.46	0.00	-151	346	
~~10~~ 1103	0.4	14.11	26.63	11.92	2.05	0.00	-133	113	
1108	0.6	14.11	26.71	11.62	1.89	0.00	-125	81.8	
1113	0.8	14.11	26.94	11.57	1.91	0.00	-125	73.8	
1118	1.0	14.11	27.16	11.55	1.97	0.00	-126	121	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C055-PZM000	1123	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: CMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: ~~C057-PZM0~~ C057-PZP002	Date: 9/14/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 15.31	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 18.06	Condition of Pad/Cover: okay / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1019	0	15.31	23.98	11.84	2.12	0.00	-88	76.6	
1024	0.2	15.37	24.26	11.87	2.11	0.00	-155	26.3	
1029	0.4	15.36	24.63	11.90	2.11	0.00	-169	5.7	
1034	0.6	15.35	24.94	11.93	2.10	0.00	-171	3.4	
1039	0.8	15.31	25.29	11.93	2.07	0.00	-171	2.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C057-PZP002	1044	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: CMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ ft x _____ gal/ft = _____ (gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: C058-PZM001	Date: 9/14/19
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 13.39	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 19.52	Condition of Pad/Cover: Okay / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0943	0.1	13.39	22.90	11.48	2.09	0.00	-130	136	
0948	0.3	13.42	22.74	11.64	2.14	0.00	-168	10.9	
0953	0.5	13.45	22.86	11.64	2.13	0.00	-176	6.9	
0958	0.7	13.45	22.93	11.63	2.13	0.00	-180	2.9	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C058-PZM001	1003	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO26-PZM007	Date: 9/14/19
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 11.61	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 19.33	Condition of Pad/Cover: none / poor

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0850	0.2	11.61	21.72	9.11	0.209	0.00	-94	129	
0855	0.4	11.61	21.86	9.10	0.159	0.00	-154	93.4	
0900	0.6	11.61	21.96	9.56	0.186	0.00	-176	65.7	
0905	0.8	11.61	22.04	10.74	0.481	0.00	-188	82.8	
0910	1.0	11.61	22.11	11.12	0.826	0.00	-204	81.4	
0915	1.2	11.61	22.18	11.33	1.28	0.0	-218	63.7	
0920	1.4	11.61	22.23	11.45	1.59	0.00	-222	47.3	
0925	1.6	11.61	22.28	11.61	1.82	0.00	-230	26.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO26-PZM007	0930	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: C060-PZP001	Date: 9/14/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 14.89	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 19.04	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0818	0	14.89	22.51	10.07	1.69	1.02	-32	144	
0823	0.2	14.90	22.24	10.60	1.70	0.00	-111	80.5	
0828	0.4	14.92	22.01	10.67	1.69	0.00	-119	27.1	
0833	0.6	14.90	21.86	10.70	1.66	0.00	-119	7.1	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C060-PZP001	0838	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMJ

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO93-PZMxxx	Date: 9/13/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 10.20	Flow Rate (mL/min) 250
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 20.11	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1501	0	10.20	29.73	11.44	1.50	0.00	-323	232	
1506	0.25	10.20	29.68	11.49	1.53	0.00	-346	173	
1511	0.5	10.20	29.57	11.43	1.61	0.00	-351	170	
1516	0.75	10.20	29.58	11.46	1.62	0.00	-352	158	
1521	1.0	10.20	29.65	11.43	1.63	0.00	-352	152	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO93-PZMxxx	1526	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: Lmq

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ ft x _____ gal/ft = _____ (gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: C041-PZM036	Date: 9/13/14
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 13.42	Flow Rate (mL/min) ~~200~~ 250
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft) 51.38	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1424	0	13.42	25.90	9.24	1.52	0.00	-291	42.0	
1429	0.25	13.42	26.45	10.15	1.53	0.00	-302	28.0	
1434	0.5	13.42	26.84	10.26	1.55	0.00	-301	22.9	
1439	0.75	13.42	27.28	10.29	1.57	0.00	-299	95.9	
1444	1.0	13.42	27.73	10.30	1.57	0.00	-304	89.8	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C041-PZM036	1449	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: CMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO41-PZM001	Date: 9/13/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 12.39	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 16.22	Condition of Pad/Cover: good / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1340	0	12.39	24.19	8.43	0.707	0.01	-113	167	
1345	0.2	12.39	24.33	8.62	0.702	0.00	-100	63.9	
1350	0.4	12.39	24.62	8.60	0.700	0.00	-130	15.5	
1355	0.6	12.39	24.76	8.61	0.697	0.00	-148	10.0	
1400	0.8	12.39	24.92	8.59	0.693	0.00	-158	6.4	
1405	1.0	12.39	25.06	8.54	0.691	0.00	-176	5.7	
1410	1.2	12.39	25.32	8.55	0.687	0.00	-184	0.0	
1415	1.4	12.39	25.51	8.56	0.681	0.00	-190	0.0	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO41-PZM001	1420	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO36-PZMO43	Date: 9/13/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 7.00	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 52.56	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1235	0	7.00	22.68	11.00	1.27	0.00	-99	21.7	
1240	0.2	7.00	23.26	11.70	2.14	0.00	-247	7.8	
1245	0.4	7.00	23.39	11.85	2.74	0.00	-264	5.6	
1250	0.6	7.00	23.44	11.91	3.04	0.00	-270	3.8	
1255	0.8	7.00	23.44	11.90	3.07	0.00	-269	2.6	
1300	1.0	7.00	23.45	11.89	3.09	0.00	-271	4.9	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO36-PZMO43	1305	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO36-PZM008	Date: 9/13/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 6.36	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 14.21	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1150	0	6.36	22.50	11.84	1.72	6.25	-245	50.9	
1155	0.2	6.39	22.43	11.86	1.68	0.00	-259	18.7	
1200	0.4	6.39	22.40	11.82	1.56	0.00	-263	8.9	
1205	0.6	6.40	22.44	11.73	1.40	0.00	-258	11.0	
1210	0.8	6.40	22.55	11.57	1.13	0.00	-229	7.5	
1215	1.0	6.40	22.76	11.43	0.987	0.00	-206	1.9	
1220	1.2	6.40	22.89	11.40	0.959	0.00	-199	0.0	
1225	1.4	6.40	23.05	11.38	0.953	0.00	-198	0.0	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO36-PZM008	1230	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ ft x _____ gal/ft = _____ (gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: CO 42 - PZMOOY4	Project Number:
Well Number: Coke Oven 3rd Quarter	Date: 9/13/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 7.61	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 16.72	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1034	0.2	7.61	20.36	4.88	0.576	2.67	146	8.6	
1039	0.45	7.63	20.48	5.31	0.539	0.93	-62	2.7	
1044	0.70	7.65	20.59	5.32	0.477	0.64	-99	0.3	
1049	0.95	7.67	20.73	5.47	0.658	0.53	-115	1.5	
1054	1.20	7.70	20.86	5.47	0.480	0.21	-120	1.6	
1059	1.45	7.74	21.08	5.06	0.427	0.15	-81	15.3	
1104	1.65	7.74	21.20	5.10	0.415	0.00	-104	5.6	
1109	1.90	7.74	21.32	5.19	0.436	0.00	-123	4.1	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO42-PZMOO4	1114	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: MG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ ft x _____ gal/ft = _____ (gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO27-PZM012	Date: 9/12/19
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 4.51	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 17.67	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1355	0	4.51	28.65	6.82	2.13	1.25	-150	116	
1400	0.2	4.57	20.39	9.84	2.43	0.00	-292	41.1	
1405	0.4	4.61	22.31	9.91	2.19	0.00	-302	92.6	
1410	0.6	4.63	22.98	9.94	2.07	0.00	-309	61.9	
1415	0.8	4.63	23.16	9.94	2.03	0.00	-309	20.0	
1420	1.0	4.63	23.28	9.93	2.00	0.00	-311	8.6	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO27-PZM012	1425	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: CMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ ft x _____ gal/ft = _____ (gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO27-PZM046	Date: 9/12/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 8.88	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 51.72	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1431	0	8.88	24.04	7.05	1.17	0.00	-272	40.0	
1436	0.2	8.88	24.29	7.17	0.978	0.00	-313	35.8	
1441	0.4	8.88	24.51	7.17	0.904	0.00	-324	25.6	
1446	0.6	8.88	24.77	7.15	0.900	0.00	-330	23.7	
1451	0.8	8.88	25.14	7.13	0.890	0.00	-336	24.5	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO27-PZM046	1456	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO 101 - PZMXXX	Date: 9/11/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 12.03	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 20.78	Condition of Pad/Cover: not sloping / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1223	0.1	12.03	26.24	7.59	2.43	0.03	-138	33.5	
1228	0.35	17.11	26.12	7.89	1.70	0.05	-131	10.4	Δ flow
1233	0.6	purged	dry						
~~1238~~	~~0.85~~								

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO101-PZMXXX	~~1350~~ 9/12 0830	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: CMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO37-PZM038	Date: 9/12/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 12.31	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 50.08	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0856	0	12.31	21.17	10.06	2.16	1.49	-226	7.2	
0901	0.25	12.31	20.88	10.32	2.15	0.00	-294	5.2	
0906	0.5	12.31	20.74	10.37	2.26	0.00	-311	3.4	
0911	0.75	12.31	20.62	10.40	2.29	0.00	-313	3.8	
0916	1.0	12.31	20.54	10.42	2.29	0.00	-316	3.6	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO37-PZM038	0924	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO39-PZM007	Date: 9/12/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 6.49	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 18.04	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0939	0	6.49	21.43	9.43	4.10	0.00	-277	0.0	
0944	0.25	7.09	21.33	9.63	4.20	0.00	-299	89.9	
0949	0.45	7.11	21.26	9.68	4.25	0.00	-302	25.7	
0954	0.65	7.10	21.31	9.68	4.25	0.00	-303	13.1	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO39-PZM007	0959	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO39-PZM042	Date: 4/12/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 6.21	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 46.78	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1003	0	6.21	20.76	10.17	3.02	0.00	-290	270	
1008	0.2	6.43	21.38	10.29	2.84	0.00	-319	13.6	
1013	0.4	6.45	21.49	10.28	2.82	0.00	-327	13.5	
1018	0.6	6.46	21.51	10.25	2.67	0.00	-329	12.6	
1023	0.8	6.46	21.60	10.19	2.41	0.00	-329	14.1	
1028	1.0	6.46	21.74	10.09	2.10	0.00	-326	12.4	
1033	1.2	6.46	21.93	9.93	1.75	0.00	-318	11.3	
1038	1.4	6.46	22.02	9.75	1.49	0.00	-313	9.9	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO39-PZM042	1043	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO40-PZM008	Date: 9/12/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 6.50	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 18.02	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1100	0	6.50	22.88	7.76	4.85	4.55	-126	805	turbid
1105	0.25	7.02	23.15	7.11	4.17	1.11	-241	48.8	clear
1110	0.45	7.11	23.32	7.07	4.20	0.25	-251	19.9	
1115	0.65	7.15	23.52	6.98	4.13	0.00	-243	10.3	
1120	0.85	7.17	23.67	7.02	4.12	0.00	-240	8.3	
~~1125~~									

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO40-PZM008	1125	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO38-PZM006	Date: 9/12/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 6.11	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 15.75	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1212	0	6.11	26.22	8.78	2.75	0.00	-268	113	
1217	0.2	6.32	27.06	9.08	2.46	0.00	-291	10.5	
1222	0.4	6.49	26.95	9.08	2.41	0.00	-296	6.8	
1227	0.6	6.55	26.72	9.06	2.38	0.00	-298	5.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO38-PZM006	1232	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: C038 - PZM043	Date: 9/12/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 7.08	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 50.42	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1239	0	7.08	25.01	6.53	1.47	0.00	-198	30.0	
1244	0.2	7.11	26.06	6.46	1.26	0.00	-205	6.1	
1249	0.4	7.13	26.10	6.42	1.24	0.00	-202	5.8	
1254	0.6	7.14	26.09	6.39	1.24	0.00	-200	9.0	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C038-PZM043	1259	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: mG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO18-PZM006	Date: 9/11/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 11.72	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 20.08	Condition of Pad/Cover: okay

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
~~1454~~	~~0~~	~~11.72~~	~~29.01~~	~~8.01~~	~~0.000~~				
1456	0.1	11.72	28.88	6.65	1.45	0.00	-95	99.1	
1501	0.3	11.82	28.43	6.38	1.65	0.00	-83	89.2	
1506	0.5	11.92	28.02	6.39	1.65	0.00	-84	87.8	
1511	0.7	11.92	27.77	6.40	1.64	0.00	-83	86.8	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO18-PZM006	1516	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO02-PZM0006	Date: 9/11/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 14.42	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 19.65	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1402	0	14.42	28.82	7.91	1.12	0.00	-94	71.1	odor
1407	0.2	14.42	28.28	7.86	1.12	0.00	-150	38.6	
1412	0.4	14.42	28.27	7.80	1.10	0.00	-179	37.7	
1417	0.6	14.42	28.19	7.70	1.09	0.00	-191	37.3	
1422	0.8	14.42	28.12	7.60	1.07	0.00	-201	35.5	
1427	1.0	14.42	28.09	7.60	1.06	0.00	-211	38.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO02-PZM0006	1432	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO102-PzmXXX	Date: 9/11/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 12.53	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 19.82	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1254	0	12.53	17.03	10.53	95.4	10.49	-423	95.6	
1259	0.2	12.53	17.13	9.96	95.3	10.20	-352	75.9	
1304	0.4	12.53	17.21	9.73	95.1	10.11	-327	59.9	
1309	0.6	12.53	17.37	9.55	94.8	10.01	-316	38.2	
1314	0.8	12.53	17.59	9.39	94.3	9.91	-311	30.4	
1319	1.0	12.53	17.77	9.06	93.9	9.81	-308	20.7	Large change?
1324	1.2	12.53	27.37	7.86	0.987	0.00	13	14.9	
1329	1.4	12.53	27.49	7.83	0.981	0.00	15	10.1	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO102-PzmXXX	1329	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: CMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ ft x _____ gal/ft = _____ (gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: C030-PZM060	Date: 9/11/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 12.58	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 22.21	Condition of Pad/Cover: not sloping / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1113	0	13.58	22.56	8.90	5.35	0.26	-30	133	
1118	0.25	13.76	23.21	7.26	5.46	0.00	-217	507	
1123	0.5	13.79	23.59	7.18	5.59	0.00	-195	643	
1128	0.75	13.81	23.85	7.18	5.78	0.00	-190	641	
1133	1.0	13.81	24.32	7.17	6.08	0.00	-187	590	
1138	1.25	13.81	24.46	7.18	6.20	0.00	-187	551	
1143	1.5	13.81	24.60	7.19	6.30	0.00	-186	533	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C030-PZM060	1148	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: MG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke. Oven 3rd Quarter	Project Number:
Well Number: CO30-PZM015	Date: 9/11/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 11.96	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 27.68	Condition of Pad/Cover: not sloping / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1040	0.1	11.96	23.41	11.79	2.18	0.00	-223	42.7	
1045	0.35	11.96	23.48	11.69	2.15	0.00	-231	26.0	
1050	0.65	11.96	23.24	11.61	2.17	0.00	-264	12.5	
1055	0.8	11.96	22.99	11.58	2.19	0.00	-231	30.7	
1100	1.0	11.96	22.79	11.64	2.19	0.00	-231	21.5	
1105	1.25	11.96	22.70	11.65	2.20	0.00	-231	12.1	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO30-PZM015	1110	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: CMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Lake Owen 3rd Quarter	Project Number:
Well Number: CO103-Pem XXX	Date: 9/11/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 13.23	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): 20.66	Condition of Pad/Cover: not sloping / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0941	0	13.23	20.13	7.56	0.001	3.92	158	268	clear
0946	0.2	13.23	20.42	11.91	3.53	0.00	-190	77.6	
0951	0.4	13.23	20.67	11.78	3.04	0.00	-194	13.1	
0956	0.6	13.23	20.99	11.68	2.76	0.00	-198	10.4	
1001	0.8	13.23	21.39	11.60	2.49	0.00	-201	3.8	
1006	1.0	13.23	21.79	11.53	2.34	0.00	-201	2.9	
1011	1.2	13.23	22.17	11.44	2.03	0.00	-199	1.8	
1016	1.4	13.23	22.55	11.36	1.75	0.00	-250	1.0	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO103-Pem XXX	1021	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	N
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 3rd Quarter	Project Number:
Well Number: CO104-P2m XXX	Date: 9/11/17
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): none	QED Controller Settings:
Depth to Water (ft): 13.24	Flow Rate (mL/min) 200
Product Thickness (ft): none	Length of time Purged (min)
Depth to Bottom (ft): ~~14.57~~ 19.57	Condition of Pad/Cover: not sloping / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
0846	0	13.24	17.43	5.52	5.55	7.16	326	2.5	
0851	0.25	14.51	18.09	8.96	10.1	5.73	194	0.9	Δ flow
0856	0.35	14.81	18.42	8.82	3.55	5.20	177	1.6	
0901	0.45	14.81	18.52	9.53	9.21	4.33	130	49.2	clear
0906	0.55	14.83	18.60	9.51	8.53	3.57	106	106	
0911	0.65	14.85	18.76	9.08	2.84	2.60	131	19.1	
0916	0.75	14.85	18.91	8.97	2.85	2.21	143	9.9	
0921	0.85	14.85	19.07	8.89	2.87	1.11	149	5.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO104-P2m XXX	0926	TCL-VOCs	3 - 40 mL VOA	HCl	X
		TPH-GRO	3 - 40 mL VOA	HCl	X
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2- 1 L Amber	HCl	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LMG

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170384M-1-[illegible]
Well Number: CO02-PZM006	Date: 12-12-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 14.97	Flow Rate (mL/min) 273
Product Thickness (ft): NA	Length of time Purged (min)
Depth to Bottom (ft): 19.00	Condition of Pad/Cover: None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
850	0.0	14.97	12.3	7.32	2.136	1.93	-24.4		
855	0.3	14.97	15.5	7.35	2.138	0.64	-91.0		
900	0.6	14.99	16.5	7.47	2.157	0.47	-133.9		
905	0.9	14.99	16.7	7.54	2.141	0.40	-165.6		
910	1.4	14.99	16.9	7.55	2.124	0.35	-176.9		
915	1.8	15.00	16.7	7.56	2.088	0.34	-184.3		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO02-PZM006	917	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments: VOCs + Napthalene 3-40mL VOAs

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170394m-1-
Well Number: C018-PZM006	Date: 12-12-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 12.39	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min)
Depth to Bottom (ft): 20.05	Condition of Pad/Cover: None / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1048	0.0	12.39	18.6	6.59	2.095	0.47	-181.0		
1053	0.4	12.39	18.8	6.57	2.085	0.37	-172.1		
1058	0.8	12.42	18.9	6.54	2.059	0.33	-159.7		
1103	1.2	12.43	19.2	6.52	2.050	0.33	-154.0		
1108	1.6	12.43	19.2	6.49	2.032	0.32	-146.0		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C018-PZM006	1110	Naph. ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 4th Q 2017	Project Number: 17038UM-1
Well Number: CO093-PZMXXX	Date: 12-12-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 10.88	Flow Rate (mL/min) 273
Product Thickness (ft): NA	Length of time Purged (min)
Depth to Bottom (ft): 20.02	Condition of Pad/Cover: None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1005	0.0	10.88	15.8	11.73	1.495	1.81	-231.2		
1010	0.3	10.89	16.0	11.85	1.803	0.46	-321.9		
1015	0.7	10.99	16.1	11.97	2.005	0.35	-370.0		
1020	1.1	11.03	16.3	12.00	2.054	0.33	-383.3		
1025	1.4	11.04	16.3	12.01	2.068	0.31	-388.9		
1030	1.8	11.04	16.4	12.01	2.076	0.31	-388.8		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO093-PZMXXX	1032	~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170394m-1
Well Number: C038-PZM006	Date: 12-12-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 6.29	Flow Rate (mL/min) 235
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 15.73	Condition of Pad/Cover: none / good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1328	0.0	6.29	13.6	10.66	2.362	0.86	-211.6		
1333	0.3	6.33	14.0	10.59	2.359	0.44	-238.8		
1338	0.65	6.33	13.8	10.56	2.349	0.39	-255.5		
1343	0.95	6.33	13.5	10.54	2.339	0.36	-277.3		
1348	1.25	6.33	13.1	10.52	2.342	0.35	-284.6		
1353	1.55	6.33	13.2	10.52	2.339	0.35	-290.8		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C038-PZM006	1355	Naph, ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	✓
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170334M-1-
Well Number: C036-PZM008	Date: 12-12-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 6.64	Flow Rate (mL/min) 246
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 14.18	Condition of Pad/Cover: OK / Good (Slopes in)

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1218	0.0	6.64	13.6	11.98	1.395	0.85	-99.3		
1223	0.3	6.66	13.5	11.96	1.470	0.64	-119.9		
1228	0.65	6.69	13.6	11.96	1.436	0.66	-138.8		
1233	1.00	6.69	13.5	11.95	1.406	0.63	-137.7		
1238	1.3	6.70	13.3	11.94	1.394	0.63	-141.2		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C036-PZM008	1240	Napth ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Cole Oven 4th Q 2017	Project Number: 170384M-1
Well Number: C036-PZM043	Date: 12-12-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 7.23	Flow Rate (mL/min) 276
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 52.02	Condition of Pad/Cover: OK / Good

PURGING RECORD

(Slopes in)

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1248	0.0	7.23	11.4	11.92	2.160	4.31	-114.5		
1253	0.4	7.23	13.2	12.15	3.385	0.65	-194.0		
1258	0.8	7.24	13.2	12.17	3.391	0.53	-212.3		
1303	1.10	7.24	13.2	12.20	3.397	0.48	-228.9		
1308	1.50	7.25	13.3	12.21	3.400	0.45	-243.5		
1313	1.90	7.25	13.2	12.21	3.394	0.44	-252.9		
1318	2.20	7.25	13.1	12.22	3.389	0.43	-260.7		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C036-PZM043	1320	Naph, ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170384m-1-
Well Number: C038-PZM043	Date: 12-12-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 7.25	Flow Rate (mL/min) 254
Product Thickness (ft): NA	Length of time Purged (min) 15
Depth to Bottom (ft): 49.80	Condition of Pad/Cover: None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1359	0.0	7.25	13.4	8.22	1.363	1.15	-170.3		
1404	0.35	7.25	13.5	7.80	1.350	0.59	-185.1		
1409	0.70	7.25	13.5	7.70	1.345	0.47	-184.1		
1414	1.00	7.28	13.6	7.66	1.342	0.44	-184.3		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C038-PZM043	1416	No pH ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ ft x _____ gal/ft = _____ (gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170384m-1-5
Well Number: C041-PZM036	Date: 12-14-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 14.09	Flow Rate (mL/min) 288
Product Thickness (ft): NA	Length of time Purged (min)
Depth to Bottom (ft): 15.21	Condition of Pad/Cover: poor / Good slopes in

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1443	0.0	14.09	10.5	11.54	1.688	0.54	-385.8		
1448	0.4	14.12	11.1	11.55	1.737	0.40	-395.7		
1453	0.8	14.13	11.1	11.55	1.749	0.38	-396.9		
1458	1.15	14.13	10.9	11.56	1.765	0.38	-396.1		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C041-PZM036	1501	TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 4th Q 2017	Project Number: 170384m - 1 - 5
Well Number: C041-PZM001	Date: 12-14-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 12.98	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 15.96	Condition of Pad/Cover: Good / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1407	0.0	12.98	10.8	8.14	1.146	0.72	-254.6		
1412	0.4	12.98	11.0	8.01	1.139	0.57	-266.5		
1417	0.8	12.98	11.1	7.98	1.123	0.48	-283.7		
1422	1.2	12.98	10.5	7.99	1.078	0.45	-292.8		
1427	1.6	12.99	10.9	8.04	1.039	0.42	-300.7		
1432	2.0	12.99	11.5	8.06	1.023	0.40	-303.5		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C041-PZM001	1434	North TCL-VOCs	3 - 40 mL VOA	HCl	✓
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170384M-1-5
Well Number: C027-PZM046	Date: 12-14-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 8.10	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 15
Depth to Bottom (ft): 51.18	Condition of Pad/Cover: None / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1308	0.0	8.10	13.2	8.64	1.107	1.00	-298.6		
1313	0.4	8.10	13.4	8.33	1.094	0.49	-313.9		
1318	0.8	8.09	13.4	8.25	1.080	0.41	-322.1		
1323	1.2	8.09	13.2	8.22	1.094	0.37	-328.2		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C027-PZM046	1325	Naph TCL-VOCs	3 - 40 mL VOA	HCl	✓
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name:	Coke Oven 4th Q 2017	Project Number:	170384m-1-5
Well Number:	C027-PZM012	Date:	12-14-17
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	4.94	Flow Rate (mL/min)	303
Product Thickness (ft):	NA	Length of time Purged (min)	
Depth to Bottom (ft):	17.49	Condition of Pad/Cover:	None / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1334	0.0	4.94	13.3	11.56	1.813	0.49	-394.7		
1339	0.4	4.94	13.6	11.58	1.843	0.37	-401.0		
1344	0.8	4.94	13.4	11.60	1.851	0.35	-401.2		
1349	1.2	4.94	13.1	11.62	1.852	0.35	-400.6		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C027-PZM012	1351	Naph ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LCP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Temporary Piezometers

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170384m-1-5
Piezometer Number: CO39-PZM042	Date: 12-14-17
Piezometer Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 8.66	Flow Rate (mL/min) 276
Product Thickness (ft): NA	Length of time Purged (min) 15
Depth to Bottom (ft): 46.10	Pad / cover : None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1240	0.0	8.66	12.4	11.88	2.326	0.74	-332.8		
1245	0.40	8.69	11.9	11.89	2.278	0.46	-363.9		
1250	0.75	8.69	11.9	11.88	2.237	0.42	-371.6		
1255	1.10	8.69	12.2	11.84	2.212	0.40	-377.1		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO39-PZM042	1258	Water TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2 - 1 L Amber	HCl	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 4th Q 2017	Project Number: 170384/M-1-5
Well Number: C039-PZM007	Date: 12-14-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 7.18	Flow Rate (mL/min) 227
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 17.86	Condition of Pad/Cover: None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1201	0.00	7.18	13.2	11.50	3.642	1.10	-157.2		
1206	0.40	7.18	13.0	11.56	3.749	0.61	-217.6		
1211	0.80	7.18	13.4	11.55	3.769	0.51	-253.6		
1216	1.20	7.19	13.8	11.51	3.760	0.45	-286.0		
1221	1.60	7.19	12.7	11.51	3.786	0.45	-318.0		
1226	1.40	7.20	12.6	11.47	3.770	0.44	-327.5		
1231	1.80	7.20	13.0	11.42	3.766	0.41	-336.9		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C039-PZM007	1233	~~TCL~~ NAPTL-VOCs	3 - 40 mL VOA	HCl	✓
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170384M-1-5
Well Number: C040-PZM008	Date: 12-14-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 7.31	Flow Rate (mL/min) 254
Product Thickness (ft): NA	Length of time Purged (min) 15
Depth to Bottom (ft): 17.74	Condition of Pad/Cover: None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1133	0.0	7.31	8.7	7.39	3.267	1.05	158.7		
1138	0.35	7.31	8.9	7.41	3.279	0.75	153.0		
1143	0.70	7.33	9.3	7.44	3.275	0.64	145.7		
1148	1.00	7.33	9.3	7.48	3.292	0.58	137.3		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C040-PZM008	1150	Naph ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 4th Q 2017	Project Number: 170384m-1-5
Well Number: C042-PZM004	Date: 12-14-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 8.73	Flow Rate (mL/min) 246
Product Thickness (ft): NA	Length of time Purged (min)
Depth to Bottom (ft): 16.41	Condition of Pad/Cover: None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1101	0.0	16.41	11.5	7.72	1.525	1.33	210.6		
1106	0.3	16.44	11.2	8.01	1.505	0.97	199.5		
1111	0.6	16.45	11.5	8.10	1.496	0.74	181.6		
1116	0.9	16.45	9.8	8.20	1.486	0.64	174.7		
1121	1.3	16.46	10.7	8.24	1.475	0.58	165.1		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C042-PZM004	1122	Naph/TCL-VOCs	3 - 40 mL VOA	HCl	✓
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Temporary Piezometers

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170384m-1
Piezometer Number: C037-PZM038	Date: 12-12-17
Piezometer Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 12.47	Flow Rate (mL/min) 227
Product Thickness (ft): NA	Length of time Purged (min)
Depth to Bottom (ft): 49.80	pad / cover None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1429	0.0	12.47	13.5	12.07	2.137	0.73	-269.1		
1434	0.3	12.47	13.6	12.12	2.287	0.51	-297.3		
1439	0.6	12.47	13.6	12.15	2.299	0.46	-342.4		
1444	0.9	12.48	13.4	12.18	2.273	0.42	-371.6		
1449	1.20	12.48	13.2	12.20	2.272	0.40	-379.6		
1454	1.50	12.48	13.1	12.22	2.304	0.39	-383.0		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C037-PZM038	1456	TCL-VOCs	3 - 40 mL VOA	HCl	✓
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		Oil & Grease	2 - 1 L Amber	HCl	
		Total Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name:	Colp over 4th Q 2017	Project Number:	170384m-1-5
Well Number:	C0103-PZMXXX	Date:	12-18-17
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	13.89	Flow Rate (mL/min)	151
Product Thickness (ft):	NA	Length of time Purged (min)	25
Depth to Bottom (ft):	20.56	Condition of Pad/Cover:	Good / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1341	0.0	13.93	16.9	12.64	4.129	1.90	-103.5		
1346	0.20	13.94	16.7	12.67	4.192	0.73	-181.6		
1351	0.40	13.97	16.8	12.67	4.223	0.60	-200.9		
1356	0.60	13.99	16.7	12.67	4.201	0.54	-215.9		
1401	0.80	14.00	16.9	12.66	4.089	0.50	-224.8		
1406	1.00	14.00	17.0	12.65	4.007	0.49	-232.9		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0103-PZMXXX	1408	~~TCL~~ Naphthalene-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name:	Coke oven 4th Q 2017	Project Number:	170384m-1-5
Well Number:	C0102-Pzm XXX	Date:	12-18-17
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	13.26	Flow Rate (mL/min)	151
Product Thickness (ft):	NA	Length of time Purged (min)	20
Depth to Bottom (ft):	19.33	Condition of Pad/Cover:	none / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1424	0.0	13.26	17.2	12.27	1.762	1.77	-137.7		
1429	0.20	13.26	16.6	12.20	1.724	0.73	-190.4		
1434	0.40	13.27	16.6	12.18	1.732	0.59	-214.6		
1439	0.60	13.27	16.4	12.18	1.733	0.55	-223.4		
1444	0.30	13.27	16.5	12.17	1.724	0.52	-231.4		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0102-PZmXXX	1446	Naph ~~TPH~~-VOCs	3 - 40 mL VOA	HCl	✓
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 4th Q 2017	Project Number: 170384m-1-5
Well Number: CO104-P2mXXX	Date: 12-18-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 13.94	Flow Rate (mL/min) 147
Product Thickness (ft): NA	Length of time Purged (min) 40
Depth to Bottom (ft): 19.18	Condition of Pad/Cover: Good / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1223	0.0	13.94	16.7	10.26	14.601	1.48	-73.5		
1228	0.25	13.94	17.0	10.18	12.446	0.95	-86.5		
1233	0.50	14.12	16.9	10.20	11.146	1.14	-83.7		
1238	0.70	14.63	16.7	10.23	10.066	1.37	-77.4		
1243	0.90	14.67	16.8	10.27	9.237	1.73	-67.7		
1248	1.10	14.47	16.3	10.36	8.305	1.92	-57.9		
1253	1.25	14.52	16.2	10.39	7.842	2.04	-49.5		
1258	1.40	14.54	15.5	10.41	7.779	2.07	-41.0		
1303	1.55	14.55	15.2	10.42	7.665	2.06	-36.6		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO104	1305	Naph ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____ gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 4th Q 2017	Project Number: 170384m-1-5
Well Number: CO30-PZM060	Date: 12-18-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 14.49	Flow Rate (mL/min) 151
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 23.65	Condition of Pad/Cover: None/ Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1142	0.0	14.49	15.2	7.70	9.230	1.80	-240.3		
1147	0.20	14.49	14.1	7.34	9.968	0.54	-197.3		
1152	0.40	14.49	14.0	7.33	9.912	0.56	-182.8		
1157	0.60	14.49	14.0	7.34	9.927	0.54	-179.3		
1202	0.80	14.49	13.6	7.35	9.922	0.57	-174.3		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO30-PZM060	1205	Naph ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 4th Q 2017	Project Number: 170384m-1.5
Well Number: C055-PZM000	Date: 12-18-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 14.85	Flow Rate (mL/min) 178
Product Thickness (ft): NA	Length of time Purged (min) 15
Depth to Bottom (ft): 17.06	Condition of Pad/Cover: OK / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
900	0.0	14.85	10.6	12.04	3.615	1.27	-123.3		
905	0.30	16.54	11.2	12.05	3.060	1.39	-130.9		
910	0.50	16.71	11.0	12.08	3.081	1.47	-140.5		
915	0.70	16.80	10.9	12.10	3.110	1.61	-147.8		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C055-PZM000	915	~~TCL~~ NPH-VOCs	3 - 40 mL VOA	HCl	X
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name:	Coke oven 4th Q 2017	Project Number:	170384M-1-5
Well Number:	C030-PZM015	Date:	12-18-17
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	12.77	Flow Rate (mL/min)	227
Product Thickness (ft):	NA	Length of time Purged (min)	35
Depth to Bottom (ft):	27.67	Condition of Pad/Cover:	None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1100	0.0	12.77	13.6	12.12	2.499	1.36	177.1		
1105	0.3	12.77	14.4	12.14	2.647	0.81	-3.9		
1110	0.6	12.77	14.4	12.27	2.668	0.68	-88.2		
1115	0.9	12.77	14.4	12.35	2.669	0.61	-121.3		
1120	1.20	12.77	14.3	12.45	2.677	0.56	-148.0		
1125	1.50	12.77	14.0	12.51	2.689	0.57	-168.6		
1130	1.80	12.77	13.4	12.52	2.685	0.56	-173.9		
1135	2.10	12.77	12.8	12.54	2.692	0.56	-181.1		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C030-PZM015	1130	Rapid TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name:	Coke oven GW @ 2017	Project Number:	170384m-1-5
Well Number:	C057-P2P002	Date:	12-18-17
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	16.97	Flow Rate (mL/min)	125
Product Thickness (ft):	NA	Length of time Purged (min)	15
Depth to Bottom (ft):	17.93	Condition of Pad/Cover:	/ Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
944	0.0	17.00	10.7	11.80	1.731	1.86	245.4		
949	0.20	17.35	11.0	11.81	1.778	1.59	225.6		
954	0.35	17.65	10.4	11.82	1.830	1.52	217.6		
959	0.50	17.82	10.3	11.84	1.851	1.49	209.4		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C057-P2P002	1002	Naph TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name:	Coke Oven 4th a 2017	Project Number:	170384M-1-5
Well Number:	C0101-PZMXXX	Date:	12-18-17
Well Diameter (in):	2	One Well Volume (gal):	
Depth to Product (ft):	NA	QED Controller Settings:	
Depth to Water (ft):	12.81	Flow Rate (mL/min)	
Product Thickness (ft):	NA	Length of time Purged (min)	
Depth to Bottom (ft):	13.34	Condition of Pad/Cover:	/

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
Purged dry in 1 min					blocked @ 13'				
				Well	is supposed to be 20'				

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
See below	—	TCL-VOCs	3 - 40 mL VOA	HCl	
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments: Could not sample due enough water in well / Blocked

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name:	Coke oven 4th Q 2017	Project Number:	170384M-1-5
Well Number:	C058-PZM001	Date:	12-15-17
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	14.26	Flow Rate (mL/min)	189
Product Thickness (ft):	NA	Length of time Purged (min)	20
Depth to Bottom (ft):	19.30	Condition of Pad/Cover:	None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1344	0.0	14.26	10.4	11.95	2.393	1.01	-120.4		
1349	0.3	14.37	10.7	11.94	2.312	0.73	-145.1		
1354	0.55	14.41	10.9	11.92	2.276	0.67	-159.3		
1359	0.75	14.42	10.1	11.94	2.288	0.62	-167.6		
1404	0.95	14.43	10.0	11.94	2.299	0.60	-173.8		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C058-PZM001	1406	Naph ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____ gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name:	Coke Oven 4th Q 2017	Project Number:	170384m-1-5
Well Number:	C060-PZP001	Date:	12-15-17
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	15.86	Flow Rate (mL/min)	204
Product Thickness (ft):	NA	Length of time Purged (min)	25
Depth to Bottom (ft):	19.02	Condition of Pad/Cover:	None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1300	0.0	15.86	5.9	11.38	1.715	3.05	-65.8		
1305	0.3	15.89	8.6	11.34	1.840	1.00	-83.2		
1310	0.6	15.90	9.0	11.35	1.885	0.74	-101.7		
1315	0.9	15.90	9.6	11.36	1.926	0.64	-120.3		
1320	1.15	15.91	10.2	11.36	1.948	0.59	-130.2		
1325	1.35	15.91	9.6	11.39	1.981	0.56	-140.4		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C060-PZP001	1330	TCL-VOCs	3 - 40 mL VOA	HCl	✓
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 4th Q 2017	Project Number: 170384m-1-5
Well Number: CO26-PZM007	Date: 12-15-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 12.36	Flow Rate (mL/min) 163
Product Thickness (ft): NA	Length of time Purged (min) 35
Depth to Bottom (ft): 19.39	Condition of Pad/Cover: poor / OK

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1203	0.0	12.36	12.0	11.62	1.436	0.91	-151.2		
1208	0.3	13.79	12.7	11.58	1.395	0.73	-165.1		
1213	0.5	14.00	11.3	11.63	1.420	0.67	-183.7		
1218	0.7	14.04	10.2	11.72	1.570	0.64	-195.5		
1223	0.9	13.94	10.0	11.78	1.749	0.62	-204.7		
1228	1.10	13.95	9.8	11.84	1.906	0.59	-211.6		
1233	1.30	13.95	10.1	11.86	2.009	0.57	-217.2		
1238	1.50	13.96	9.9	11.89	2.079	0.55	-221.4		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO26-PZM007	1240	Naph TCL-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name:	Coke Oven 4th Q 2017	Project Number:	170394M-1-5
Well Number:	C056-PZP001	Date:	12-15-17
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	15.73	Flow Rate (mL/min)	189
Product Thickness (ft):	NA	Length of time Purged (min)	20
Depth to Bottom (ft):	19.19	Condition of Pad/Cover:	None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1128	0.0	15.73	12.6	11.60	2.219	1.31	-107.4		
1133	0.25	15.74	12.5	11.58	2.224	0.81	-130.1		
1138	0.50	15.75	12.5	11.52	2.222	0.64	-145.0		
1143	0.75	15.76	12.5	11.51	2.227	0.59	-153.5		
1148	1.00	15.76	12.5	11.50	2.220	0.56	-159.5		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C056-PZP001	1150	Naph ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke oven 4th Q 2017	Project Number: 170384m-1-5
Well Number: C059-PZM002	Date: 12-15-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 16.54	Flow Rate (mL/min) 265
Product Thickness (ft): NA	Length of time Purged (min) 15
Depth to Bottom (ft): 19.11	Condition of Pad/Cover: None / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
1032	0.0	16.54	9.8	11.71	2.525	1.00	-157.5		
1037	0.35	16.55	10.1	11.74	2.538	0.99	-163.2		
1042	0.70	16.55	9.9	11.77	2.570	0.93	-165.9		
1047	1.05	16.55	9.8	11.79	2.544	0.80	-167.2		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C059-PZM002	1049	Naph ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LVP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft
_____ft x _____ gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 4th Q 2017	Project Number: 170384m-1-5
Well Number: C024-PZM007	Date: 12-15-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 14.95	Flow Rate (mL/min) 273
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 22.18	Condition of Pad/Cover: Good / Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
920	0.0	14.95	11.4	9.45	0.788	1.56	92.5		
925	0.4	14.95	12.3	9.61	0.761	0.89	79.9		
930	0.8	14.99	12.5	9.92	0.843	0.68	54.6		
935	1.2	15.03	12.2	10.03	0.893	0.62	33.2		
940	1.5	15.04	12.5	10.04	0.909	0.60	24.8		
945	1.8	15.04	11.9	9.96	1.038	0.58	15.1		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C024-PZM007	947	~~TCL~~ Naph-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Low Flow Sampling
Permanent Wells

ARM Group Inc.
Earth Resource Engineers and Consultants

Project Name: Coke Oven 4th Q 2017	Project Number: 170384M.1.5
Well Number: C023-PZM008	Date: 12-15-17
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 15.33	Flow Rate (mL/min) 246
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 22.15	Condition of Pad/Cover: Good/ Good

PURGING RECORD

Time	Volume Purged (gallons)	DTW (feet)	Temp (°C)	pH (s.u.) ± 0.1	Specific Conductance (ms/cm) ± 3%	Dissolved Oxygen (mg/L) ± 0.3	ORP (mV) ± 10	Turbidity (NTU) ± 10% or < 5	Comments
957	0.0	15.33	10.8	11.16	1.620	0.97	-176.5		
1002	0.3	15.36	11.3	11.18	1.623	0.64	-213.8		
1007	0.65	15.37	11.5	11.18	1.622	0.53	-241.9		
1012	1.00	15.37	11.7	11.18	1.618	0.48	-248.8		
1017	1.30	15.37	11.4	11.20	1.624	0.45	-256.7		

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C023-PZM008	1019	NaOH ~~TCL~~-VOCs	3 - 40 mL VOA	HCl	Y
		TPH-GRO	3 - 40 mL VOA	HCl	
		TPH-DRO	2 - 1 L Amber	none	
		TCL-SVOCs	2- 1 L Amber	none	
		TAL-Metals & Mercury (total)	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (total)	1 - 250 mL Plastic	none	
		Cyanide	1 - 250 mL Plastic	NaOH	
		TAL-Metals & Mercury (Dissolved) **Field Filtered**	1 - 250 mL Plastic	HNO3	
		Hexavalent Chromium (Dissolved) **Field Filtered**	1 - 250 mL Plastic	none	
		PCB	2 - 1 L Amber	None	
Matrix Spike					
Duplicate					

Sampled By: LLP

Comments:

Casing Volume: **1" I.D.** = 0.041 gal/ft - **2" I.D.** = 0.163 gal/ft - **4" I.D.** = 0.653 gal/ft - **6" I.D.** = 1.47 gal/ft

_____ft x _____gal/ft = _____(gal)

Cell 1 AS/SVE System Data Log

Date: 1/31/17

Time: 0920

Temp: 35°

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: _____ (Arrival)

System Status: _____ (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System Down.

Cell 1 AS/SVE System Data Log

Date: 1/30/17

Time: _____

Temp: 36°F

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: _____
(Arrival)

System Status: _____
(Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- *HighHighted well # indicates active sparge well*

Maintenance Work Performed, Adjustments Made and Comments:

Waiting for rep. to start up.

Cell 1 AS/SVE System Data Log

Date: 1-27-17

Time: _____

Temp: 42° mostly Cloudy windy 18mph.

Oxidizer Main Temp: _____ °F

System Status: OFF (Arrival)

Oxidizer High Temp: _____ °F

System Status: OFF (Departure)

Element High Temp: _____ °F

SVE Process Vacuum: _____ in W/C

Air Sample Collected: _____

Sparge PSI: _____ PSI

Sparge Run Time: _____

SVE Process Flow: _____ SCFM

Surge Counter: _____

Sparge Temp: _____ °F

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System is ready –
Waiting for factory rep. to start up.

Cell 1 AS/SVE System Data Log

Date: 1-26-17

Time: _____

Temp: 43° mostly cloudy.

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System is ready

waiting for factory rep. to start up.

Cell 1 AS/SVE System Data Log

Date: 1-25-17

Time: _____

Temp: 41° clear

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF. (Arrival)

System Status: OFF. (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System is ready - waiting for factory rep. to start up.

Cell 1 AS/SVE System Data Log

Date: 1-24-17

Time: _____

Temp: 39° cloudy

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System ready to run – waiting for factory rep. for start up.

Cell 1 AS/SVE System Data Log

Date: 1-23-17

Time: _____

Temp: 44° cloudy w/ rain

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System ready to run - waiting for factory rep. for start up.

Cell 1 AS/SVE System Data Log

Date: 1-20-17 **Time:** _____

Temp: 35° Cloudy.

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- *Highlighted well # indicates active sparge well*

Maintenance Work Performed, Adjustments Made and Comments:

System ready to run – waiting for factory rep. for start up.

Cell 1 AS/SVE System Data Log

Date: 1-19-17 **Time:** _____

Temp: 44° Cloudy

Oxidizer Main Temp: _____ °F **System Status:** OFF (Arrival)

Oxidizer High Temp: _____ °F **System Status:** OFF (Departure)

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC **Air Sample Collected:** _____

Sparge PSI: _____ PSI **Sparge Run Time:** _____

SVE Process Flow: _____ SCFM **Surge Counter:** _____

Sparge Temp: _____ °F **PID Reading:** _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System ready to run - waiting for factory rep. for start up.

Cell 1 AS/SVE System Data Log

Date: 1-18-17

Time: _____

Temp: 44° FOG

Oxidizer Main Temp: _____ °F

System Status: OFF (Arrival)

Oxidizer High Temp: _____ °F

System Status: OFF (Departure)

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Air Sample Collected: _____

Sparge PSI: _____ PSI

Sparge Run Time: _____

SVE Process Flow: _____ SCFM

Surge Counter: _____

Sparge Temp: _____ °F

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- *Highlighted well # indicates active sparge well*

Maintenance Work Performed, Adjustments Made and Comments:

System is ready to run – waiting for factory rep. to be present.

Cell 1 AS/SVE System Data Log

Date: 1-17-17 **Time:** 0720

Temp: 39° cloudy.

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System is ready to run after we gather a base round of data.

Cell 1 AS/SVE System Data Log

Date: 1-16-17

Time: 0710

Temp: 34° mostly cloudy

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- *Highlighted well # indicates active sparge well*

Maintenance Work Performed, Adjustments Made and Comments:

System is ready to run after we gather a base round of field data.

Cell 1 AS/SVE System Data Log

Date: 1-13-17 Time: 0655

Temp: 55° party cloudy.

Oxidizer Main Temp: _____ °F System Status: OFF (Arrival) (*)

Oxidizer High Temp: _____ °F System Status: OFF (Departure)

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC Air Sample Collected: NO

Sparge PSI: _____ PSI Sparge Run Time: _____

SVE Process Flow: _____ SCFM Surge Counter: _____

Sparge Temp: _____ °F PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- *Highlighted well # indicates active sparge well*

Maintenance Work Performed, Adjustments Made and Comments:

(*) ready to run after we gather a base round of field data.

Cell 1 AS/SVE System Data Log

Date: 1-12-17 **Time:** 0645

Temp: 55° clear

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: NO

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

Cell switched over to carbon

Need to get a base round of field data.

Cell 1 AS/SVE System Data Log

Date: 1-11-17

Time: 0645.

Temp: 43°

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: NO

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

Switching over to carbon.

Cell 1 AS/SVE System Data Log

Date: 1-10-17 **Time:** _____

Temp: 28°

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: NO

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

Cell off until we switch to carbon.

Cell 1 AS/SVE System Data Log

Date: 1-9-17 **Time:** 0700

Temp: 15°

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: No

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

Cell off until we switch to carbon.

Cell 1 AS/SVE System Data Log

Date: 1-6-17 **Time:** 0700

Temp: 31°

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: NO

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

Cell off until we switch to carbon

Cell 1 AS/SVE System Data Log

Date: 1-5-17 Time: _____

Temp: 28°

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: NO

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- *Highlighted well # indicates active sparge well*

Maintenance Work Performed, Adjustments Made and Comments:

Cell off until we switch to carbon

Cell 1 AS/SVE System Data Log

Date: 1-4-17 Time: 0650

Temp: 46°

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: No

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- *Highlighted well # indicates active sparge well*

Maintenance Work Performed, Adjustments Made and Comments:

Cell off until we switch to carbon

Cell 1 AS/SVE System Data Log

Date: 1-3-2017 **Time:** 0700

Temp: 41°

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: NO

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

Cell off until we switch to carbon

Cell 2 AS/SVE System Data Log

Date: 1/31/17 **Time:** 0930

Temp: 35 °F

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 547 °F

Element High Temp: 708 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 103 SCFM

Sparge Temp: 74 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 626

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1/30/17 **Time:** 0940

Temp: 36°

Oxidizer Main Temp: 575 °F

Oxidizer High Temp: 554 °F

Element High Temp: 716 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 103 SCFM

Sparge Temp: 78 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 603

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-27-17 **Time:** _____

Temp: 42° Mostly cloudy. windy 18 mph.

Oxidizer Main Temp: 568 °F

Oxidizer High Temp: 547 °F

Element High Temp: 715 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 101 SCFM

Sparge Temp: 80 °F

System Status: (Arrival) ON.

System Status: (Departure) ON.

Air Sample Collected: NO

Sparge Run Time: 527.

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-26-17 **Time:** 1000

Temp: 43° mostly cloudy.

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 549 °F

Element High Temp: 717 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 104 SCFM

Sparge Temp: 85 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 504

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-25-17 **Time:** 1000

Temp: 41° clear

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 548 °F

Element High Temp: 716 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 102 SCFM

Sparge Temp: 84 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Sparge Run Time: 479

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Sparge room temp.
Xp room temp.

Cell 2 AS/SVE System Data Log

Date: 1-24-17 **Time:** _____

Temp: 39° cloudy.

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 549 °F

Element High Temp: 717 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 101 SCFM

Sparge Temp: 84 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 455

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Sparge room temp. 54°
xp room temp. 53°

Cell 2 AS/SVE System Data Log

Date: 1-23-17 **Time:** _____

Temp: 44° cloudy w/rain

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 548 °F

Element High Temp: _____ °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 104 SCFM

Sparge Temp: 90 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 432

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-20-17 **Time:** 1050

Temp: 35° cloudy.

Oxidizer Main Temp: 568 °F

Oxidizer High Temp: 548 °F

Element High Temp: 712 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 103 SCFM

Sparge Temp: 82 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Sparge Run Time: 360

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Sparge room temp. 55°
Xp room temp. 60°

Cell 2 AS/SVE System Data Log

Date: 1-19-17 **Time:** _____

Temp: 44° Cloudy

Oxidizer Main Temp: 570 °F

Oxidizer High Temp: 549 °F

Element High Temp: 712 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 105 SCFM

Sparge Temp: 89 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 335

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-18-17 **Time:** _____

Temp: 44° Fog.

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 548 °F

Element High Temp: 713 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 104 SCFM

Sparge Temp: 91 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 313

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Sparge room temp. 65°
Xp room temp. 61°

Cell 2 AS/SVE System Data Log

Date: 1-17-17 **Time:** _____

Temp: 39° cloudy

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 548 °F

Element High Temp: 715 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 103 SCFM

Sparge Temp: 86 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 288

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Sparge room temp. 54°
Xp room temp. 61°

Cell 2 AS/SVE System Data Log

Date: 1-16-17 **Time:** 0740

Temp: 34° mostly cloudy

Oxidizer Main Temp: 570 °F

Oxidizer High Temp: 548 °F

Element High Temp: 715 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 102 SCFM

Sparge Temp: 83 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 264

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Sparge room temp. 48°
Xp room temp. 56°

Cell 2 AS/SVE System Data Log

Date: 1-13-17 **Time:** 0655

Temp: 55° partly cloudy.

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 549 °F

Element High Temp: 720 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 104 SCFM

Sparge Temp: 102 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 191

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Sparge room temp. 63
Xp room temp. 62

Cell 2 AS/SVE System Data Log

Date: 1-12-17 **Time:** 0840

Temp: 55° clear

Oxidizer Main Temp: 568 °F

Oxidizer High Temp: 548 °F

Element High Temp: 719 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 103 SCFM

Sparge Temp: 101 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 167

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-11-17 **Time:** 0730

Temp: 41° clear
SUNNY

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 547 °F

Element High Temp: 719 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 102 SCFM

Sparge Temp: 88 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 144

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-10-17 **Time:** 1300

Temp: 28°

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 546 °F

Element High Temp: 800 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 102 SCFM

Sparge Temp: 82 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 126

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-9-17 **Time:** 1020

Temp: 13°

Oxidizer Main Temp: 574 °F

Oxidizer High Temp: 516 °F

Element High Temp: 802 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 98 SCFM

Sparge Temp: 50 °F

System Status: OFF
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 99

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

sparge room temp. 28°

xp room temp. 26°

Cell 2 AS/SVE System Data Log

Date: 1-6-17 **Time:** 1030

Temp: 31

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: — °F

SVE Process Vacuum: 4 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0 SCFM

Sparge Temp: 29 °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: NO

Sparge Run Time: 99

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-5-17 **Time:** 0900

Temp: 30°

Oxidizer Main Temp: 29 °F

Oxidizer High Temp: 28 °F

Element High Temp: — °F

SVE Process Vacuum: 4 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0 SCFM

Sparge Temp: 38 °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: No

Sparge Run Time: 99

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-4-17 **Time:** 0730

Temp: 46°

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 547 °F

Element High Temp: 730 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 104 SCFM

Sparge Temp: 85 °F

System Status: ON
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: No

Sparge Run Time: 99

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-3-17 **Time:** 1200

Temp: 41°

Oxidizer Main Temp: 574 °F

Oxidizer High Temp: 550 °F

Element High Temp: 733 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 104 SCFM

Sparge Temp: 88 °F

System Status: OFF
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 82

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1/31/17 **Time:** 0920

Temp: 35

Total Discharge:	9690766	gal	**Mag Gauge Flow:**	1.20 (0.50-1.0)
Daily Discharge	13,547	gal	**System Status: (Arrival)**	On
AST Pressure:	33.1	in WC	**System Status: (Departure)**	On
Oxidizer Main Temp:	674.3	°F		
Oxidizer High Temp:	464.2	°F	**Sample Collected:**	N
Element Temp:	808	°F	**Bag Filters Replaced:**	Y
Room Temp:	48.6	°F	**Cartridge Filters Replaced:**	N
Inf water PH	7.70 (7.0-9.0)	pH	**Remianing Cartridge Filters:**	\
Inf Bag Filter DP:	0/0	PSI		
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	231
Remaining Bag Filters:	~20	#	**Defoamer level:**	~7 Gallons

Run Times (hours)

Inlet pump	7939	AST Pump	4712	MS Pump	152
AST Blower	14590	Outlet Pump	6700	GW Pumps	6231

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1/30/17 **Time:** 0930

Temp: 36°

Total Discharge: 9677219 gal

Daily Discharge 21,428 gal

AST Pressure: 32.6 in WC

Oxidizer Main Temp: 665.4 °F

Oxidizer High Temp: 486.8 °F

Element Temp: 918 °F

Room Temp: 56.8 °F

Inf water PH 7.72 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: ~40 #

Mag Gauge Flow: 1.15 (0.50-1.0)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: N

Cartridge Filters Replaced: Bypassed

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: ~7 Gallons

Run Times (hours)

Inlet pump 7934 AST Pump 4707 MS Pump 152

AST Blower 14567 Outlet Pump 6681 GW Pumps 6216

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-26-17 **Time:** _____

Temp: 42° Mostly Cloudy windy 18 mph.

Total Discharge: 9612934 gal

Daily Discharge 20,196 gal

AST Pressure: 32.3 in WC

Oxidizer Main Temp: 651.7 °F

Oxidizer High Temp: 465.4 °F

Element Temp: 780 °F

Room Temp: 56.4 °F

Inf water PH 7.61 pH (7.0-9.0)

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 20 #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: Yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: full

Run Times (hours)

Inlet pump 7912 AST Pump 4682 MS Pump 152

AST Blower 14492 Outlet Pump 6624 GW Pumps 6149.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-26-17 **Time:** 0900

Temp: 43° mostly cloudy.

Total Discharge: 9592738 gal

Daily Discharge 21,129 gal

AST Pressure: 31.5 in WC

Oxidizer Main Temp: 670.3 °F

Oxidizer High Temp: 489.6 °F

Element Temp: 786 °F

Room Temp: 60.9 °F

Inf water PH 8.39 pH (7.0-9.0)

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 19 #

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 7 gals.

Run Times (hours)

Inlet pump 7905 AST Pump 4674 MS Pump 152

AST Blower 14468 Outlet Pump 6606 GW Pumps 6127

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-25-17 **Time:** _____

Temp: 41° clear

Total Discharge: 9571609 gal

Daily Discharge 20,780 gal

AST Pressure: 32.2 in WC

Oxidizer Main Temp: 645.2 °F

Oxidizer High Temp: 475.4 °F

Element Temp: 787 °F

Room Temp: 55.8 °F

Inf water PH 8.29 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 19 #

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 10 gals.

Run Times (hours)

Inlet pump 7897 AST Pump 4666 MS Pump 152

AST Blower 14444 Outlet Pump 6588 GW Pumps 6105

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-24-17 **Time:** _____

Temp: 39° cloudy

Total Discharge:	9550829	gal	**Mag Gauge Flow:**	1.0	(0.50-1.0)
Daily Discharge	19,830	gal	**System Status:** (Arrival)	ON	
AST Pressure:	31.8	in WC			
Oxidizer Main Temp:	677.8	°F	**System Status:** (Departure)	ON	
Oxidizer High Temp:	473.3	°F	**Sample Collected:**	NO	
Element Temp:	786	°F	**Bag Filters Replaced:**	NO	
Room Temp:	58.6	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	8.29	pH (7.0-9.0)	**Remianing Cartridge Filters:**	0	
Inf Bag Filter DP:	o/o o/o	PSI			
Eff Bag Filter DP:	o/o o/o	PSI	**Surge Counter:**	231	
Remaining Bag Filters:	19	#	**Defoamer level:**	full	

Run Times (hours)

Inlet pump	7890	AST Pump	4658	MS Pump	152
AST Blower	14420	Outlet Pump	6570	GW Pumps	6084

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-23-17 **Time:** 0845

Temp: 44° cloudy w/rain

Total Discharge: 9530999 gal 61,819 ÷3

Mag Gauge Flow: .75 (0.50-1.0)

Daily Discharge 20,603 gal

System Status: ON (Arrival)

AST Pressure: 31.5 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 678.7 °F

Oxidizer High Temp: 465.5 °F

Sample Collected: No

Element Temp: 484 °F

Bag Filters Replaced: yes

Room Temp: 59.1 °F

Cartridge Filters Replaced: No

Inf water PH 8.40 pH (7.0-9.0)

Remianing Cartridge Filters: 0

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Surge Counter: 231

Remaining Bag Filters: 19 #

Defoamer level: 6 gals.

Run Times (hours)

Inlet pump 7883 AST Pump 4650 MS Pump 152

AST Blower 14397 Outlet Pump 6552 GW Pumps 6063.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-20-17 **Time:** 0942

Temp: 35° cloudy

Total Discharge: 9469189 gal

Daily Discharge 20,542 gal

AST Pressure: 32.4 in WC

Oxidizer Main Temp: 668.9 °F

Oxidizer High Temp: 488.0 °F

Element Temp: 817 °F

Room Temp: 57.4 °F

Inf water PH 8.34 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 12 #

Mag Gauge Flow: (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: No

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 9 gals

Run Times (hours)

Inlet pump 7861 AST Pump 4635 MS Pump 152

AST Blower 14325 Outlet Pump 6499 GW Pumps 5997

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-20-17 **Time:** _____

Temp: 42° SUNNY.

Total Discharge: 10076560 gal 68500 ÷3 **Mag Gauge Flow:** 1.25 (0.50-1.0)

Daily Discharge 19,500 gal **System Status:** ON (Arrival)

AST Pressure: 32.6 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 655.0 °F

Oxidizer High Temp: 475.5 °F **Sample Collected:** NO

Element Temp: 842 °F **Bag Filters Replaced:** NO

Room Temp: 59.0 °F **Cartridge Filters Replaced:** NO

Inf water PH 7.70 PH

Inf Bag Filter DP: 0/0 0/0 PSI **Remianing Cartridge Filters:** 0

Eff Bag Filter DP: 0/0 0/0 PSI **Surge Counter:** 231

Remaining Bag Filters: 50 # **Defoamer level:** 5 gals.

Run Times (hours)

Inlet pump 8075 AST Pump 4872 MS Pump 152

AST Blower 15068 Outlet Pump 7040 GW Pumps 6663.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-19-17 **Time:** _____

Temp: 44° Cloudy

Total Discharge: 9448647 gal

Daily Discharge 18,731 gal

AST Pressure: 32.0 in WC

Oxidizer Main Temp: 676.9 °F

Oxidizer High Temp: 469.4 °F

Element Temp: 898 °F

Room Temp: 61.1 °F

Inf water PH 8.41 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: .75 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 10 gals.

Run Times (hours)

Inlet pump 7854 AST Pump 4617 MS Pump 152

AST Blower 14300 Outlet Pump 6481 GW Pumps 5975

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-18-17 **Time:** _____

Temp: 44° Fog

Total Discharge: 9429916 gal

Daily Discharge 1415 gal

AST Pressure: 30.8 in WC

Oxidizer Main Temp: 671.8 °F

Oxidizer High Temp: 458.9 °F

Element Temp: 943 °F

Room Temp: 61.3 °F

Inf water PH 8.37 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: .75 (0.50-1.0)

System Status: OFF (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: full

Run Times (hours)

Inlet pump 7847 AST Pump 4609 MS Pump 152

AST Blower 14276 Outlet Pump 6465 GW Pumps 5954

Maintenance Work Performed, Adjustments Made and Comments:

ground water pumps were turned off. accidently ?

Cell 2 GW Pump and Treat System Data Log

Date: 1-17-17 **Time:** _____

Temp: 39° Cloudy

Total Discharge: 9428501 gal

Daily Discharge 18,889 gal

AST Pressure: 32.8 in WC

Oxidizer Main Temp: 669.2 °F

Oxidizer High Temp: 468.1 °F

Element Temp: 898 °F

Room Temp: 57.7 °F

Inf water PH 8.14 pH (7.0-9.0)

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 4 gals.

Run Times (hours)

Inlet pump 7846 AST Pump 4608 MS Pump 152

AST Blower 14253 Outlet Pump 6464 GW Pumps 5953.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-16-17 **Time:** 0725

Temp: 34° mostly cloudy

Total Discharge: 9409612 gal 63689 ÷3

Daily Discharge 21,229 gal

AST Pressure: 33.5 in WC

Oxidizer Main Temp: 678.7 °F

Oxidizer High Temp: 472.6 °F

Element Temp: 856 °F

Room Temp: 55.5 °F

Inf water PH 7.74 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: .85 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: Yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 6 gals.

Run Times (hours)

Inlet pump 7840 AST Pump 4601 MS Pump 152

AST Blower 14228 Outlet Pump 6448 GW Pumps 5933

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-13-17 **Time:** 0900

Temp: 55° partly cloudy

Total Discharge: 9345923 gal

Mag Gauge Flow: .95 (0.50-1.0)

Daily Discharge * 21,542 gal

System Status: ON (Arrival)

AST Pressure: 31.9 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 653.9 °F

Oxidizer High Temp: 469.9 °F

Sample Collected: NO

Element Temp: 817 °F

Bag Filters Replaced: Yes

Room Temp: 64.6 °F

Cartridge Filters Replaced: NO

Inf water PH 8.34 pH (7.0-9.0)

Remianing Cartridge Filters: 0

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Surge Counter: 231

Remaining Bag Filters: 30 #

Defoamer level: 9 gals.

Run Times (hours)

Inlet pump 7818 AST Pump 4575 MS Pump 152

AST Blower 14156 Outlet Pump 6393 GW Pumps 5868

Maintenance Work Performed, Adjustments Made and Comments:

inf. bags came out of vessels with no issues - changed bags - eff. bags had issues - screens came out with the bags, screens gummed up - cleaned screens & replaced bags - on going issue.

Cell 2 GW Pump and Treat System Data Log

Date: 1-12-17 **Time:** 0700

Temp: 55° clear

Total Discharge: 9324381 gal

Daily Discharge 20,701 gal

AST Pressure: 31.6 in WC

Oxidizer Main Temp: 663.1 °F

Oxidizer High Temp: 478.9 °F

Element Temp: 869 °F

Room Temp: 62.2 °F

Inf water PH 8.33 pH (7.0-9.0)

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o PSI

Remaining Bag Filters: 34 #

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: Yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 5 gals.

Run Times (hours)

Inlet pump 7810 AST Pump 4566 MS Pump 152

AST Blower 14132 Outlet Pump 6374 GW Pumps 5846

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-11-17 **Time:** 0715

Temp: 41° clear

Total Discharge: 9303680 gal

Daily Discharge 20,776 gal

AST Pressure: 32.5 in WC

Oxidizer Main Temp: 657.9 °F

Oxidizer High Temp: 468.1 °F

Element Temp: 889 °F

Room Temp: 57.2 °F

Inf water PH 8.10 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 34 #

Mag Gauge Flow: .75 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 5 gals.

Run Times (hours)

Inlet pump 7803 AST Pump 4558 MS Pump 152

AST Blower 14109 Outlet Pump 6356 GW Pumps 5825.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-10-17 **Time:** 1200

Temp: 28°

Total Discharge: 9282904 gal

Daily Discharge 21,484 gal

AST Pressure: 33.2 in WC

Oxidizer Main Temp: 650.0 °F

Oxidizer High Temp: 481.6 °F

Element Temp: 859 °F

Room Temp: 51.7 °F

Inf water PH 8.30 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 38 #

Mag Gauge Flow: .70 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 6 gals.

Run Times (hours)

Inlet pump 7797 AST Pump 4551 MS Pump 152

AST Blower 14091 Outlet Pump 6342 GW Pumps 5809

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-9-17 **Time:** 0800

Temp: 13°

Total Discharge: 9261420 gal 59490 ÷3

Daily Discharge 19,830 gal

AST Pressure: 34.6 in WC

Oxidizer Main Temp: 664.4 °F

Oxidizer High Temp: 480.9 °F

Element Temp: 865 °F

Room Temp: 41.9 °F

Inf water PH 8.25 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 38 #

Mag Gauge Flow: ... (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 7 gals.

Run Times (hours)

Inlet pump 7787 AST Pump 4539 MS Pump 152

AST Blower 14060 Outlet Pump 6319 GW Pumps 5781

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-6-17 **Time:** 0730

Temp: 31°

Total Discharge: 9201930 gal

Daily Discharge * 24,832 gal

AST Pressure: 32.8 in WC

Oxidizer Main Temp: 644.9 °F

Oxidizer High Temp: 651.9 °F

Element Temp: 800 °F

Room Temp: 52.7 °F

Inf water PH 8.34 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 38 #

Mag Gauge Flow: .70 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: yes

Bag Filters Replaced: yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: Ø

Surge Counter: 231

Defoamer level: 9 gals.

Run Times (hours)

Inlet pump 7766 AST Pump 4515 MS Pump 152

AST Blower 13933 Outlet Pump 6269 GW Pumps 5720

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-5-17 **Time:** 0700

Temp: 26°

Total Discharge: 9177098 gal

Daily Discharge 22,066 gal

AST Pressure: 33.0 in WC

Oxidizer Main Temp: 662.4 °F

Oxidizer High Temp: 486.5 °F

Element Temp: 834 °F

Room Temp: 53.9 °F

Inf water PH 7.31 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 42 #

Mag Gauge Flow: .70 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 8 gals.

Run Times (hours)

Inlet pump 7759 AST Pump 4506 MS Pump 152

AST Blower 13969 Outlet Pump 6250 GW Pumps 5698

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 1-4-17 **Time:** _____

Temp: 46°

Total Discharge:	9155032 gal	**Mag Gauge Flow:**	.70 (0.50-1.0)
Daily Discharge	21,859 gal	**System Status:** (Arrival)	ON
AST Pressure:	31.6 in WC	**System Status:** (Departure)	ON
Oxidizer Main Temp:	670.8 °F		
Oxidizer High Temp:	474.5 °F	**Sample Collected:**	NO
Element Temp:	823 °F	**Bag Filters Replaced:**	yes
Room Temp:	61.8 °F	**Cartridge Filters Replaced:**	NO
Inf water PH	7.14 pH (7.0-9.0)	**Remianing Cartridge Filters:**	0
Inf Bag Filter DP:	0/0 0/0 PSI		
Eff Bag Filter DP:	0/0 0/0 PSI	**Surge Counter:**	231
Remaining Bag Filters:	42 #	**Defoamer level:**	5 gals.

Run Times (hours)

Inlet pump 7749	AST Pump 4495	MS Pump 152
AST Blower 13940	Outlet Pump 6228	GW Pumps 5672

Maintenance Work Performed, Adjustments Made and Comments:

GW pump cycle time 1200 seconds on 20 minutes pump on
120 seconds off 2 minutes pump off

Cell 2 GW Pump and Treat System Data Log

Date: 1-3-17 **Time:** 1100

Temp: 41°

Total Discharge: 9133173 gal 109732 ÷ 4

Daily Discharge 27,433 gal

AST Pressure: 32.5 in WC

Oxidizer Main Temp: 646.1 °F

Oxidizer High Temp: 475.9 °F

Element Temp: 880 °F

Room Temp: 60.6 °F

Inf water PH 8.43 pH (7.0-9.0)

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: .70 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes.

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: Ø

Surge Counter: 231

Defoamer level: 9 gals.

Run Times (hours)

Inlet pump 7742 AST Pump 4484 MS Pump 152

AST Blower 13916 Outlet Pump 6209 GW Pumps 5651

Maintenance Work Performed, Adjustments Made and Comments:

Sparge room temp. 59°
Xp room temp 59°

Cell 3 AS/SVE System Data Log

Date: 1/31/17 **Time:** 0930

Temp: 35

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: _____ (Arrival)

System Status: _____ (Departure)

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

PLC not working - Waiting for parts

Cell 3 AS/SVE System Data Log

Date: 1/30/17 **Time:** 0945

Temp: 36°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) _____

System Status: (Departure) _____

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

PLC not working - Need parts for repair

Cell 3 AS/SVE System Data Log

Date: 1-27-17 **Time:** _____

Temp: 42° Mostly Cloudy windy 18 mph.

SVE Process Vacuum:	— in WC	**System Status:** (Arrival)	OFF
Sparge PSI:	— PSI		
SVE Process Flow:	— SCFM	**System Status:** (Departure)	OFF
Sparge Temp:	30.6 °F	**Air Sample Collected:**	NO
Control Room Temp:	31.4 °F	**SVE Run Time:**	6645
XP Room Temp:	34.7 °F	**Sparge Run Time:**	6177

Maintenance Work Performed, Adjustments Made and Comments:

PCL is bad - waiting parts -

Cell 3 AS/SVE System Data Log

Date: 1-26-17 **Time:** _____

Temp: 43° mostly cloudy

SVE Process Vacuum:	_____ in WC	**System Status:** (Arrival)	OFF
Sparge PSI:	_____ PSI		
SVE Process Flow:	_____ SCFM	**System Status:** (Departure)	OFF
Sparge Temp:	30.6 °F	**Air Sample Collected:**	NO
Control Room Temp:	31.4 °F	**SVE Run Time:**	6645
XP Room Temp:	34.7 °F	**Sparge Run Time:**	6177

Maintenance Work Performed, Adjustments Made and Comments:

PCL bad – waiting parts.

Cell 3 AS/SVE System Data Log

Date: 1-25-17 **Time:** _____

Temp: 41° clear

SVE Process Vacuum:	–	in WC	**System Status:** (Arrival)	OFF
Sparge PSI:	–	PSI		
SVE Process Flow:	–	SCFM	**System Status:** (Departure)	OFF
Sparge Temp:	30.6	°F	**Air Sample Collected:**	No
Control Room Temp:	31.4	°F	**SVE Run Time:**	6645
XP Room Temp:	34.7	°F	**Sparge Run Time:**	6177

Maintenance Work Performed, Adjustments Made and Comments:

PCL Bad. – waiting parts

Cell 3 AS/SVE System Data Log

Date: 1-24-17 **Time:** _____

Temp: 39° cloudy.

SVE Process Vacuum: — in WC

Sparge PSI: — PSI

SVE Process Flow: — SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: NO

SVE Run Time: 6645

Sparge Run Time: 6177

Maintenance Work Performed, Adjustments Made and Comments:

PCL bad.

Cell 3 AS/SVE System Data Log

Date: 1-23-17 **Time:** _____

Temp: 44° cloudy w/rain

SVE Process Vacuum:	—	in WC	**System Status:** (Arrival)	OFF
Sparge PSI:	—	PSI		
SVE Process Flow:	—	SCFM	**System Status:** (Departure)	OFF
Sparge Temp:	30.6	°F	**Air Sample Collected:**	NO
Control Room Temp:	31.4	°F	**SVE Run Time:**	6645
XP Room Temp:	34.7	°F	**Sparge Run Time:**	6177

Maintenance Work Performed, Adjustments Made and Comments:

PCL bad - waiting parts.

Cell 3 AS/SVE System Data Log

Date: 1-20-17 **Time:** _____

Temp: 35° cloudy

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: No

SVE Run Time: 6645

Sparge Run Time: 6177

Maintenance Work Performed, Adjustments Made and Comments:

PCL bad - waiting parts.

Cell 3 AS/SVE System Data Log

Date: 1-19-17 **Time:** _____

Temp: 44° cloudy.

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: NO

SVE Run Time: 6645

Sparge Run Time: 6177

Maintenance Work Performed, Adjustments Made and Comments:

PCL bad- w/parts

Cell 3 AS/SVE System Data Log

Date: 1-18-17 **Time:** _____

Temp: 43° Fog

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: NO

SVE Run Time: 6645

Sparge Run Time: 6177

Maintenance Work Performed, Adjustments Made and Comments:

PCL bad.

Cell 3 AS/SVE System Data Log

Date: 1-17-17 **Time:** _____

Temp: 39° cloudy

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: NO

SVE Run Time: 6645

Sparge Run Time: 6177

Maintenance Work Performed, Adjustments Made and Comments:

PCL bad

Cell 3 AS/SVE System Data Log

Date: 1-16-17 **Time:** 0800

Temp: 34° cloudy

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: NO

SVE Run Time: 6645

Sparge Run Time: 6177

Maintenance Work Performed, Adjustments Made and Comments:

PCL bad

Cell 3 AS/SVE System Data Log

Date: 1-13-17 **Time:** 0715

Temp: 55° partly cloudy

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: NO

SVE Run Time: 6645

Sparge Run Time: 6177

Maintenance Work Performed, Adjustments Made and Comments:

Electrical – bad PCL

Cell 3 AS/SVE System Data Log

Date: 1-12-17 **Time:** 0800

Temp: 55° clear

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: NO

SVE Run Time: 6645

Sparge Run Time: 6177

Maintenance Work Performed, Adjustments Made and Comments:

Out Of Service - needs PCL.

Cell 3 AS/SVE System Data Log

Date: 1-11-17 **Time:** 0800

Temp: 41°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: NO

SVE Run Time: 6645

Sparge Run Time: 6177

Maintenance Work Performed, Adjustments Made and Comments:

out of service - needs PCL.

Cell 3 AS/SVE System Data Log

Date: 1-10-17 **Time:** 1300

Temp: 28°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: NO

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

Electrical problems – with computer

Cell 3 AS/SVE System Data Log

Date: 1-9-17 **Time:** 1000

Temp: 13°

SVE Process Vacuum:	/	in WC	**System Status:** (Arrival)	OFF
Sparge PSI:	/	PSI		
SVE Process Flow:	/	SCFM	**System Status:** (Departure)	OFF
Sparge Temp:	30.6	°F	**Air Sample Collected:**	NO
Control Room Temp:	31.4	°F	**SVE Run Time:**	6645
XP Room Temp:	34.7	°F	**Sparge Run Time:**	6177

Maintenance Work Performed, Adjustments Made and Comments:

xp room temp. 34.7°
control room temp. 31.4°

ran on manual - would not build up air psi

Cell 3 AS/SVE System Data Log

Date: 1-6-17 **Time:** 1100

Temp: 31°

SVE Process Vacuum: — in WC

Sparge PSI: — PSI

SVE Process Flow: — SCFM

Sparge Temp: 37.6 °F

Control Room Temp: 41.1 °F

XP Room Temp: 43.2 °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: NO

SVE Run Time: 6645

Sparge Run Time: 6177

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 1-5-17 **Time:** 0830

Temp: 30

SVE Process Vacuum:	43.2	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	7.8	PSI	**System Status:** (Departure)	OFF
SVE Process Flow:	2.8	SCFM		
Sparge Temp:	49.9	°F	**Air Sample Collected:**	NO
Control Room Temp:	38.7	°F	**SVE Run Time:**	6645
XP Room Temp:	47.6	°F	**Sparge Run Time:**	6177

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 1-4-17 **Time:** 0800

Temp: 46°

SVE Process Vacuum: 48.3 in WC

Sparge PSI: 8.5 PSI

SVE Process Flow: 2.7 SCFM

Sparge Temp: 59.4 °F

Control Room Temp: 50.3 °F

XP Room Temp: 56.3 °F

System Status: (Arrival) ON

System Status: (Departure) OFF

Air Sample Collected: NO

SVE Run Time: 6617

Sparge Run Time: 6149

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 1-3-17 **Time:** 0710

Temp: 41°

SVE Process Vacuum: 45.1 in WC

Sparge PSI: 11.2 PSI

SVE Process Flow: 2.4 SCFM

Sparge Temp: 47.4 °F

Control Room Temp: 51.3 °F

XP Room Temp: 48.4 °F

System Status: (Arrival) OFF

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 6593

Sparge Run Time: 6125

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5

Date: 1/31/17 **Time:** 0930

Temp: 35

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) _____

System Status: (Departure) _____

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ **Outlet Pump**_____ **Booster Blower**_____

AST Blower_____ **MS Pump**_____ **Aeration Blower**_____

AST Pump_____ **Dual Phase**_____

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad - waiting for parts

Date: 1/30/17 **Time:** 0945

Temp: 36°

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____

System Status: (Arrival) Off (1.50-2.00)

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ **Outlet Pump**_____ **Booster Blower**_____

AST Blower_____ **MS Pump**_____ **Aeration Blower**_____

AST Pump_____ **Dual Phase**_____

Maintenance Work Performed, Adjustments Made and Comments:

PLC- bad - waiting for parts

Cell 5 GW Pump and Treat System Data Log

Date: 1-27-17 **Time:** 0710

Temp: 42° Mostly Cloudy
windy 18 mph.

Total Discharge:	10599590	Gal	**Mag Gauge Flow:**	(1.50-2.00)
Daily Discharge:		Gal	**System Status: (Arrival)**	OFF
AST Pressure:	30.8	in WC	**System Status: (Departure)**	OFF
Dual Phase Vacuum:	0.2	in WC		
Dual Phase Temp:	140.5	°F	**Sample Collected:**	NO
XP Room Temp:	60.0	°F	**Bag Filters Replaced:**	NO
Control room: **AST water PH**	58.4	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO
Inf Bag Filter DP:		PSI	**Remianing Cartridge**	#
Eff Bag Filter DP:		PSI	**Surge Counter:**	12,168
Remaining Bag Filters:		#	**Remaining Defoamer:**	

Run Times

Inlet Pump	6324	Outlet Pump	8052	Booster Blower	11383
AST Blower	11405	MS Pump	6194	Aeration Blower	7879.
AST Pump	3532	Dual Phase	8496		

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad - waiting parts - promise date 2/6/17.

Cell 5 GW Pump and Treat System Data Log

Date: 1-26-17 **Time:** _____

Temp: 43° mostly cloudy

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____

System Status: (Arrival) (1.50-2.00) off

System Status: (Departure) OFF.

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: 12168

Remaining Defoamer: full

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

PLC Bad — waiting parts

Cell 3 Off Pump and Treat System Data Log

Date: 1-25-17 **Time:** _____

Temp: 41° clear

Total Discharge:	10599590	Gal	**Mag Gauge Flow:**	(1.50-2.00)
Daily Discharge:		Gal	**System Status: (Arrival)**	OFF
AST Pressure:		in WC	**System Status: (Departure)**	OFF
Dual Phase Vacuum:		in WC		
Dual Phase Temp:		°F	**Sample Collected:**	No
XP Room Temp:		°F	**Bag Filters Replaced:**	
AST water PH		pH(7.0-9.0)	**Cartridge Filters Replaced:**	
Inf Bag Filter DP:		PSI	**Remianing Cartridge**	#
Eff Bag Filter DP:		PSI	**Surge Counter:**	12,168
Remaining Bag Filters:		#	**Remaining Defoamer:**	full

Run Times

Inlet Pump 6324	**Outlet Pump** 8052	**Booster Blower** 11383
AST Blower 11405	**MS Pump** 6194	**Aeration Blower** 7879
AST Pump 3532	**Dual Phase** 8496	

Maintenance Work Performed, Adjustments Made and Comments:

PLC Bad – waiting parts – due in 2/6/17.

Date: 1-24-17 Time: _____

Temp: 39° cloudy.

Total Discharge: 10599590 Gal

Daily Discharge: — Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: NO

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: 12,168

Remaining Defoamer: _____

Run Times

Inlet Pump 6324

Outlet Pump 8052

Booster Blower 11383

AST Blower 11405

MS Pump 6194.

Aeration Blower 7879.

AST Pump 3532

Dual Phase 8496

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad - w/parts.

Cell 5 GW Pump and Treat System Data Log

Date: 1-23-17 **Time:** _____

Temp: 44° cloudy w/rain

Total Discharge: 10599590 Gal

Daily Discharge: — Gal

AST Pressure: 30.8 in WC

Dual Phase Vacuum: 0.2 in WC

Dual Phase Temp: 140.5 °F

XP Room Temp: 60.0 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: NO

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: 12,168

Remaining Defoamer: 12 gals.

Run Times

Inlet Pump 6324 **Outlet Pump** 8052 **Booster Blower** 11383

AST Blower 11405 **MS Pump** 6194 **Aeration Blower** 7879

AST Pump 3532 **Dual Phase** 8496

Maintenance Work Performed, Adjustments Made and Comments:

control room temp. 58.4°F

PLC bad - waiting for parts.

Cell 5 GW Pump and Treat System Data Log

Date: 1-20-17 **Time:** _____

Temp: 35° cloudy.

Total Discharge: 10599590 Gal

Daily Discharge: — Gal

AST Pressure: 30.8 in WC

Dual Phase Vacuum: 0.2 in WC

Dual Phase Temp: 140.5 °F

XP Room Temp: 60.0 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Bag Filter DP: _____ PSI

Remaining Bag Filters: — #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge — #

Surge Counter: 12,168

Remaining Defoamer: 12 gals.

Run Times

Inlet Pump 6324 **Outlet Pump** 8052 **Booster Blower** 11383

AST Blower 11405 **MS Pump** 6194 **Aeration Blower** 7879.

AST Pump 3532 **Dual Phase** 8496

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad - waiting parts.

Cell 5 GW Pump and Treat System Data Log

Date: 1-19-17 **Time:** _____

Temp: 44° cloudy

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 6324 **Outlet Pump** 8052 **Booster Blower** 11383

AST Blower 11405 **MS Pump** 6194 **Aeration Blower** 7879

AST Pump 3532 **Dual Phase** 8496

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad- waiting parts

Cell 5 GW Pump and Treat System Data Log

Date: 1-18-17 **Time:** _____

Temp: 43° FOG

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF.

System Status: (Departure) OFF.

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 6324

Outlet Pump 8052

Booster Blower 11383

AST Blower 11405

MS Pump 6194.

Aeration Blower 7879

AST Pump 3532

Dual Phase 8496

Maintenance Work Performed, Adjustments Made and Comments:

PLC Bad

Cell 5 GW Pump and Treat System Data Log

Date: 1-17-17 **Time:** _____

Temp: 39° Cloudy

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 6324 **Outlet Pump** 8052 **Booster Blower** 11383

AST Blower 11405 **MS Pump** 6194 **Aeration Blower** 7879

AST Pump 3532 **Dual Phase** 8496

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad

Cell 5 GW Pump and Treat System Data Log

Date: 1-16-17 **Time:** 0810

Temp: 34° Cloudy

Total Discharge: 10599590 Gal

Daily Discharge: / Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF.

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 6324 Outlet Pump 8052 Booster Blower 11383

AST Blower 11405 MS Pump 6194. Aeration Blower 7879.

AST Pump 3532 Dual Phase 8496

Maintenance Work Performed, Adjustments Made and Comments:

Bad PLC

Cell 5 GW Pump and Treat System Data Log

Date: 1-13-17 **Time:** 0730

Temp: 55° partly cloudy

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 6324

Outlet Pump 8052

Booster Blower 11383

AST Blower 11405

MS Pump 6194

Aeration Blower 7879.

AST Pump 3532

Dual Phase 8496

Maintenance Work Performed, Adjustments Made and Comments:

Bad PLC

Cell 5 GW Pump and Treat System Data Log

Date: 1-12-17 **Time:** _____

Temp: 55° clear

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 6324 Outlet Pump 8052 Booster Blower 11383

AST Blower 11405 MS Pump 6194 Aeration Blower 7879

AST Pump 3532 Dual Phase 8496

Maintenance Work Performed, Adjustments Made and Comments:

Out of Service - PLC bad - in committee

Cell 5 GW Pump and Treat System Data Log
5 GW

Date: 1-11-17 **Time:** _____

Temp: 41° clear sunny

Total Discharge: 10599590 Gal

Daily Discharge: Ø Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: — (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 6324 Outlet Pump 8052 Booster Blower 11383

AST Blower 11405 MS Pump 6194 Aeration Blower 7879

AST Pump 3532 Dual Phase 8496

Maintenance Work Performed, Adjustments Made and Comments:

out of service

PLC bad.

Cell 5 GW Pump and Treat System Data Log

Date: 1-10-17 **Time:** 1400

Temp: 28°

Total Discharge:	10599590	Gal	**Mag Gauge Flow:**	— (1.50-2.00)
Daily Discharge:	—	Gal	**System Status: (Arrival)**	OFF
AST Pressure:	30.8	in WC	**System Status: (Departure)**	OFF
Dual Phase Vacuum:	0.2	in WC		
Dual Phase Temp:	140.5	°F	**Sample Collected:**	NO
XP Room Temp:	60.0	°F	**Bag Filters Replaced:**	NO
AST water PH	—	pH(7.0-9.0)	**Cartridge Filters Replaced:**	Frozen
Inf Bag Filter DP:	—	PSI	**Remianing Cartridge**	19 #
Eff Bag Filter DP:	—	PSI	**Surge Counter:**	12,168
Remaining Bag Filters:	30	#	**Remaining Defoamer:**	6 gals.

Run Times

Inlet Pump	6324	**Outlet Pump**	8058	**Booster Blower**	11383
AST Blower	11405	**MS Pump**	6194	**Aeration Blower**	7879
AST Pump	3532	**Dual Phase**	8496		

Maintenance Work Performed, Adjustments Made and Comments:

System frozen up — outside water lines are frozen; they need more insulation and be lifted off the ground.

Cell 5 GW Pump and Treat System Data Log

Date: 1-9-17 **Time:** 1300 - on

Temp: 13°

Total Discharge:	10599590	Gal	**Mag Gauge Flow:**	— (1.50-2.00)
Daily Discharge:	4,550	Gal	**System Status: (Arrival)**	OFF.
AST Pressure:	30.8	in WC		
Dual Phase Vacuum:	0.2	in WC	**System Status: (Departure)**	OFF
Dual Phase Temp:	140.5	°F	**Sample Collected:**	NO
XP Room Temp:	60.0	°F	**Bag Filters Replaced:**	NO
AST water PH	—	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO
Inf Bag Filter DP:	d/o d/o	PSI	**Remianing Cartridge**	19 #
Eff Bag Filter DP:	d/o d/o	PSI	**Surge Counter:**	12,168
Remaining Bag Filters:	30	#	**Remaining Defoamer:**	6 gals

Run Times

Inlet Pump	6324	**Outlet Pump**	8052	**Booster Blower**	11383
AST Blower	11405	**MS Pump**	6194	**Aeration Blower**	7879
AST Pump	3532	**Dual Phase**	8496		

Maintenance Work Performed, Adjustments Made and Comments:

System froze up!

Cartridge filters & hoses are frozen

Cell 5 GW Pump and Treat System Data Log

Date: 1-6-17 **Time:** 1230

Temp: 31°

Total Discharge: 10595040 Gal

Daily Discharge: 22,810 Gal

AST Pressure: 30.6 in WC

Dual Phase Vacuum: 19.4 in WC

Dual Phase Temp: 162.6 °F

XP Room Temp: 63.4 °F

AST water PH 8.41 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: yes

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 19 #

Surge Counter: 12,168

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 6321

Outlet Pump 8049

Booster Blower 11375

AST Blower 11397

MS Pump 6192

Aeration Blower 7879

AST Pump 3531

Dual Phase 8494

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 1-5-17 **Time:** 1130

Temp: 30°

Total Discharge: 10572230 Gal

Daily Discharge: 25,110 Gal

AST Pressure: 30.4 in WC

Dual Phase Vacuum: 19.4 in WC

Dual Phase Temp: 164.3 °F

XP Room Temp: 59.8 °F

AST water PH 7.10 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 34 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 22 #

Surge Counter: 12,168

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 6303 Outlet Pump 8026 Booster Blower 11350

AST Blower 11372 MS Pump 6177 Aeration Blower 7879.

AST Pump 3522 Dual Phase 8476

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 1-4-17 **Time:** 1200

Temp: 46°

Total Discharge: 10547120 Gal

Daily Discharge: 24,400 Gal

AST Pressure: 29.1 in WC

Dual Phase Vacuum: 21.1 in WC

Dual Phase Temp: 166.8 °F

XP Room Temp: 65.1 °F

AST water PH 7.11 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 34 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: NO

Remianing Cartridge 22 #

Surge Counter: 12,168

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 6283

Outlet Pump 8005

Booster Blower 11322

AST Blower 11344

MS Pump 6163.

Aeration Blower 7879.

AST Pump 3513

Dual Phase 8448

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 1-3-17 **Time:** 1000

Temp: 41°

Total Discharge: 10522720 Gal 101120 ÷4

Daily Discharge: 25,280 Gal

AST Pressure: 30.0 in WC

Dual Phase Vacuum: 19.5 in WC

Dual Phase Temp: 172.0 °F

XP Room Temp: 60.8 °F

AST water PH 8.25 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 34 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes.

Cartridge Filters Replaced: yes.

Remianing Cartridge 22 #

Surge Counter: 12,168

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 6264 **Outlet Pump** 7984 **Booster Blower** 11298

AST Blower 11320 **MS Pump** 6148. **Aeration Blower** 7879.

AST Pump 3504 **Dual Phase** 8427

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 2-15-17 **Time:** _____

Temp: 33° mostly cloudy

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: ✓ (Arrival)

✓

System Status: _____ (Departure)

Air Sample Collected: _____

Surge Counter: _____

1	7	13	19
2	8	14	20
3	9	15	21
4	10	16	22
5	11	17	23
6	12	18	24
			25

Maintenance Work Performed, Adjustments Made and Comments:

Unit was shipped out yesterday for OHL to MASS.

Cell 1 AS/SVE System Data Log

Date: 2-14-17 **Time:** _____

Temp: 31° Cloudy.

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: _____
(Arrival) Disconnected

System Status: _____
(Departure)

Air Sample Collected: _____

Surge Counter: _____

1 _____	7 _____	13 _____	19 _____
2 _____	8 _____	14 _____	20 _____
3 _____	9 _____	15 _____	21 _____
4 _____	10 _____	16 _____	22 _____
5 _____	11 _____	17 _____	23 _____
6 _____	12 _____	18 _____	24 _____
			25 _____

Maintenance Work Performed, Adjustments Made and Comments:

System ready to be shipped out for OHL.

Cell 1 AS/SVE System Data Log

Date: 2-13-17 **Time:** _____

Temp: 35° clear windy.

Oxidizer Main Temp: _____ °F

System Status: disconnected
(Arrival)

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

System Status: disconnected.
(Departure)

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

Air Sample Collected: _____

SVE Process Flow: _____ SCFM

Surge Counter: _____

Sparge Temp: _____ °F

1 _____	7 _____	13 _____	19 _____
2 _____	8 _____	14 _____	20 _____
3 _____	9 _____	15 _____	21 _____
4 _____	10 _____	16 _____	22 _____
5 _____	11 _____	17 _____	23 _____
6 _____	12 _____	18 _____	24 _____
			25 _____

Maintenance Work Performed, Adjustments Made and Comments:

Unit ready to be shipped out.

Cell 1 AS/SVE System Data Log

Date: 2-10-17

Time: 0700

Temp: 22° mostly cloudy.

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: Disconnected
(Arrival)

System Status: Disconnected
(Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- HighHighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

Unit ready to ship out for OHL.

Cell 1 AS/SVE System Data Log

Date: 2-9-17

Time: 0700

Temp: 34° snowing

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

Unit ready to be shipped out for repairs

Cell 1 AS/SVE System Data Log

Date: 2-8-17

Time: 0700

Temp: 59° partly cloudy

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System disconnected - scheduled to be shipped out Fri. 2/10/17 to MASS. for OHL.

Cell 1 AS/SVE System Data Log

Date: 2-7-17.

Time: 0730

Temp: 44° mostly sunny

Oxidizer Main Temp: _____ °F

System Status: OFF
(Arrival)

Oxidizer High Temp: _____ °F

System Status: OFF.
(Departure)

Element High Temp: _____ °F

SVE Process Vacuum: _____ in W/C

Air Sample Collected: _____

Sparge PSI: _____ PSI

Sparge Run Time: _____

SVE Process Flow: _____ SCFM

Surge Counter: _____

Charge Temp: _____ °F

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System down -

Cell 1 AS/SVE System Data Log

Date: 2-6-17

Time: 0800

Temp: 35° SUNNY.

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- *Highlighted well # indicates active sparge well*

Maintenance Work Performed, Adjustments Made and Comments:

System down –

Cell 1 AS/SVE System Data Log

Date: 2/3/17

Time: 0920

Temp: 43

Oxidizer Main Temp: _____ °F

System Status: _____ (Arrival)

Oxidizer High Temp: _____ °F

System Status: _____ (Departure)

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Air Sample Collected: _____

Sparge PSI: _____ PSI

Sparge Run Time: _____

SVE Process Flow: _____ SCFM

Surge Counter: _____

Sparge Temp: _____ °F

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System Down.

Cell 1 AS/SVE System Data Log

Date: 2/2/17

Time: 0920

Temp: 43

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: _____ (Arrival)

System Status: _____ (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- Highlighted well # indicates active sparge well

Maintenance Work Performed, Adjustments Made and Comments:

System Down.

Cell 1 AS/SVE System Data Log

Date: 2/1/17

Time: 0920

Temp: 43

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in. W/C

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: _____ (Arrival)

System Status: _____ (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

PID Reading: _____ ppm

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

- *Highlighted well # indicates active sparge well*

Maintenance Work Performed, Adjustments Made and Comments:

System Down.

Cell 2 AS/SVE System Data Log

Date: 2/1/17 **Time:** 0940

Temp: 43°

Oxidizer Main Temp: 568 °F

Oxidizer High Temp: 547 °F

Element High Temp: 707 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 103 SCFM

Sparge Temp: 85 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 650

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2/2/17 **Time:** 0950

Temp: 43°F

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 548 °F

Element High Temp: 713 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 103 SCFM

Sparge Temp: 85 °F

System Status: Oa
(Arrival)

System Status: Oa
(Departure)

Air Sample Collected: N

Sparge Run Time: 674

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2/3/17 **Time:** 0950

Temp: 33°

Oxidizer Main Temp: 569 °F

Oxidizer High Temp: 547 °F

Element High Temp: 707 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 103 SCFM

Sparge Temp: 75 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 698

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

#2 air

Date: 2-6-17 **Time:** 0830

Temp: 35° Sunny.

Oxidizer Main Temp: 314 °F

Oxidizer High Temp: 360 °F

Element High Temp: 324 °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 104 SCFM

Sparge Temp: 90 °F

System Status: ON
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: N

Sparge Run Time: 771

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-7-17 **Time:** 0900

Temp: 44° Mostly Sunny.

Oxidizer Main Temp: 48 °F

Oxidizer High Temp: 47 °F

Element High Temp: _____ °F

SVE Process Vacuum: 3 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0 SCFM

Sparge Temp: 49 °F

System Status: (Arrival) OFF

System Status: (Departure) OFF.

Air Sample Collected: No

Sparge Run Time: 773

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-8-17 **Time:** 0945

Temp: 59° Partly Cloudy.

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 1 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0 SCFM

Sparge Temp: 62 °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: NO

Sparge Run Time: 173

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-9-17 **Time:** 0800

Temp: 34° snowing

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 98 SCFM

Sparge Temp: 75 °F

System Status: OFF
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 773

Surge Counter: 187.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-10-17 **Time:** 0800

Temp: 23° MOSTLY cloudy.

_____ °F

_____ °F

_____ °F

System Status: ON (Arrival)

System Status: ON (Departure)

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 97 SCFM

Sparge Temp: 65 °F

Air Sample Collected: NO

Sparge Run Time: 798

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

switching to carbon filters –

Cell 2 AS/SVE System Data Log

Date: 2-13-17 **Time:** 0815

Temp: 35° SUNNY
Windy.

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: NO

Sparge Run Time: 869

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Switching to carbon

Cell 2 AS/SVE System Data Log

Date: 2-14-17 **Time:** _____

Temp: 31° Cloudy

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 100 SCFM

Sparge Temp: 72 °F

System Status: on
(Arrival)

System Status: on
(Departure)

Air Sample Collected: NO

Sparge Run Time: 892

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Switching over to carbon

Cell 2 AS/SVE System Data Log

Date: 2-15-17 **Time:** _____

Temp: 33°

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 4 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0 SCFM

Sparge Temp: 41 °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: NO

Sparge Run Time: 899.

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Sparge motor needs to be serviced ___ . C Jeff
Check mtr for any oil leaks ___ . C Jeff

Cell 2 AS/SVE System Data Log

Date: 2-16-17 **Time:** 0730

Temp: 31° Mostly Cloudy

Oxidizer Main Temp: -0- °F

Oxidizer High Temp: -0- °F

Element High Temp: -0- °F

SVE Process Vacuum: 3 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 99 SCFM

Sparge Temp: 42 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Sparge Run Time: 902

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-17-17 **Time:** 0730

Temp: 37° MOSTLY cloudy.

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 98 SCFM

Sparge Temp: 69 °F

System Status: ON
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: NO

Sparge Run Time: 925

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 1-20-17 **Time:** _____

Temp: 42° Sunny.

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: (Arrival) OFF.

System Status: (Departure) OFF

Air Sample Collected: NO

Sparge Run Time: 925

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-21-17 **Time:** _____

Temp: 38° mostly cloudy.

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF.
(Departure)

Air Sample Collected: NO

Sparge Run Time: 925.

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-22-17 **Time:** 0700

Temp: 38° Mostly cloudy.

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 102 SCFM

Sparge Temp: 84 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No.

Sparge Run Time: 945

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-23-17 **Time:** 0730

Temp: 47° clear

Oxidizer Main Temp: ~~0~~ °F

Oxidizer High Temp: ~~0~~ °F

Element High Temp: ~~0~~ °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 102 SCFM

Sparge Temp: 93° °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 971

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-24-17 **Time:** 0700

Temp: 52° cloudy

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 36 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 103 SCFM

Sparge Temp: 93 °F

System Status: ON
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: NO

Sparge Run Time: 993

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-27-17 **Time:** 0845

Temp: 34° Sunny.

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 93 SCFM

Sparge Temp: 92 °F

System Status: (Arrival) OFF

System Status: (Departure) ON

Air Sample Collected: No

Sparge Run Time: 6

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 2-28-17 **Time:** 0730

Temp: 44° cloudy.

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 93 SCFM

Sparge Temp: 83 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 22

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-28-17 **Time:** 0700

Temp: 44° cloudy.

Total Discharge: 10231310 gal

Daily Discharge 19,610 gal

AST Pressure: 32.5 in WC

Oxidizer Main Temp: 658.6 °F

Oxidizer High Temp: 460.0 °F

Element Temp: 840 °F

Room Temp: 61.5 °F

Inf water PH 7.63 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 38 #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 0 gals.

Run Times (hours)

Inlet pump 8124 AST Pump 4939 MS Pump 152

AST Blower 15258 Outlet Pump 7180 GW Pumps 6835

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-27-17 **Time:** 0845

Temp: 34° Sunny

Total Discharge: 10211700 gal 58450 ÷3

Daily Discharge 19,483 gal

AST Pressure: 33.2 in WC

Oxidizer Main Temp: 652.2 °F

Oxidizer High Temp: 474.6 °F

Element Temp: 820 °F

Room Temp: 54.5 °F

Inf water PH 7.68 PH

Inf Bag Filter DP: do do PSI

Eff Bag Filter DP: do do PSI

Remaining Bag Filters: 42 #

Mag Gauge Flow: 1.20 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 10 gals.

Run Times (hours)

Inlet pump 8118 AST Pump 4930 MS Pump 152

AST Blower 15234 Outlet Pump 7162 GW Pumps 6813

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-24-17 **Time:** 0730

Temp: 52° cloudy.

Total Discharge: 10153250 gal

Daily Discharge 19,810 gal

AST Pressure: 31.5 in WC

Oxidizer Main Temp: 665.0 °F

Oxidizer High Temp: 477.2 °F

Element Temp: 840 °F

Room Temp: 60.7 °F

Inf water PH 7.63 PH

Inf Bag Filter DP: d/o d/o PSI

Eff Bag Filter DP: d/o d/o PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced:

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: NONE

Surge Counter: 231

Defoamer level: 6 gals.

Run Times (hours)

Inlet pump 8100 AST Pump 4906 MS Pump 152

AST Blower 15162 Outlet Pump 7109 GW Pumps 6748

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-23-17 **Time:** 0730

Temp: 47° clear

Total Discharge: 10133440 gal

Daily Discharge 19,780 gal

AST Pressure: 31.6 in WC

Oxidizer Main Temp: 669.0 °F

Oxidizer High Temp: 477.4 °F

Element Temp: 841. °F

Room Temp: 61.5 °F

Inf water PH 7.63 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231.

Defoamer level: full

Run Times (hours)

Inlet pump 8094 AST Pump 4898 MS Pump 152

AST Blower 15140 Outlet Pump 7092 GW Pumps 6727

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-22-17 **Time:** 1000

Temp: 38° mostly cloudy.

Total Discharge: 10113660 gal

Daily Discharge 19,720 gal

AST Pressure: 32.2 in WC

Oxidizer Main Temp: 678.0 °F

Oxidizer High Temp: 474.5 °F

Element Temp: 840. °F

Room Temp: 60.4 °F

Inf water PH 7.63 PH

Inf Bag Filter DP: do do PSI

Eff Bag Filter DP: do do PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: ~~0~~

Surge Counter: 231

Defoamer level: 6 gals.

Run Times (hours)

Inlet pump 8087 AST Pump 4889 MS Pump 152

AST Blower 15114 Outlet Pump 7073 GW Pumps 6704

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-21-17 **Time:** 1000

Temp: 38° Mostly cloudy.

Total Discharge: 10093940 gal

Daily Discharge 17,380 gal

AST Pressure: 32.9 in WC

Oxidizer Main Temp: 665.4 °F

Oxidizer High Temp: 465.3 °F

Element Temp: 832 °F

Room Temp: 57.4 °F

Inf water PH 7.63 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 50 #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: Yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 8 gdm.

Run Times (hours)

Inlet pump 8080 AST Pump 4880 MS Pump 152

AST Blower 15090 Outlet Pump 7055 GW Pumps 6682

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-17-17 **Time:** 0745

Temp: 37° mostly cloudy

Total Discharge:	10018060	gal	**Mag Gauge Flow:**	1.00	(0.50-1.0)
Daily Discharge	18,612	gal	**System Status: (Arrival)**	ON	
AST Pressure:	33.2	in WC			
Oxidizer Main Temp:	680.3	°F	**System Status: (Departure)**	ON	
Oxidizer High Temp:	469.5	°F	**Sample Collected:**	No	
Element Temp:	832	°F	**Bag Filters Replaced:**	Yes	
Room Temp:	47.3	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	7.68	PH			
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge Filters:**	0	
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	231	
Remaining Bag Filters:	50	#	**Defoamer level:**	6 gals.	

Run Times (hours)

Inlet pump 8054 AST Pump 4848 MS Pump 152

AST Blower 14995 Outlet Pump 6987 GW Pumps 6597

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-16-17 **Time:** _____

Temp: 31° Mostly Cloudy

Total Discharge:	9999448	gal	**Mag Gauge Flow:**	1.25	(0.50-1.0)
Daily Discharge	19,097	gal	**System Status: (Arrival)**	ON	
AST Pressure:	32.5	in WC	**System Status: (Departure)**	ON	
Oxidizer Main Temp:	663.8	°F			
Oxidizer High Temp:	468.3	°F	**Sample Collected:**	NO	
Element Temp:	835.	°F	**Bag Filters Replaced:**	No	
Room Temp:	51.7	°F	**Cartridge Filters Replaced:**	No	
Inf water PH	7.69	PH	**Remianing Cartridge Filters:**	0	
Inf Bag Filter DP:	0/0	PSI			
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	231	
Remaining Bag Filters:	50	#	**Defoamer level:**	8 gals.	

Run Times (hours)

Inlet pump	8048	AST Pump	4840	MS Pump	152
AST Blower	14972	Outlet Pump	6970	GW Pumps	6576.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-15-17 **Time:** _____

Temp: 33° Mostly Cloudy.

Total Discharge:	9980362	gal	**Mag Gauge Flow:**	1.0	(0.50-1.0)
Daily Discharge	19,287	gal	**System Status: (Arrival)**	ON	
AST Pressure:	32.3	in WC	**System Status: (Departure)**	ON	
Oxidizer Main Temp:	671.9	°F			
Oxidizer High Temp:	478.5	°F	**Sample Collected:**	NO	
Element Temp:	810	°F	**Bag Filters Replaced:**	NO	
Room Temp:	55.2	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	8.10	PH	**Remianing Cartridge Filters:**	Ø	
Inf Bag Filter DP:	0/0	PSI			
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	231	
Remaining Bag Filters:	50	#	**Defoamer level:**	10 gals.	

Run Times (hours)

Inlet pump	8041	AST Pump	4832	MS Pump	152
AST Blower	14948	Outlet Pump	6953	GW Pumps	6554

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-14-17 **Time:** _____

Temp: 31° Cloudy.

Total Discharge:	9961075	gal	**Mag Gauge Flow:**	1.0 (0.50-1.0)
Daily Discharge	18,428	gal	**System Status: (Arrival)**	ON
AST Pressure:	33.0	in WC	**System Status: (Departure)**	ON
Oxidizer Main Temp:	657.6	°F		
Oxidizer High Temp:	476.5	°F	**Sample Collected:**	NO
Element Temp:	810.	°F	**Bag Filters Replaced:**	Yes
Room Temp:	53.2	°F	**Cartridge Filters Replaced:**	NO
Inf water PH	8.10	PH	**Remianing Cartridge Filters:**	No ~~0~~
Inf Bag Filter DP:	0/0 0/0	PSI		
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	231
Remaining Bag Filters:	50	#	**Defoamer level:**	7 gals.

Run Times (hours)

Inlet pump	8034	AST Pump	4824	MS Pump	152
AST Blower	14923	Outlet Pump	6936	GW Pumps	6532

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-13-17 **Time:** _____

Temp: 35° clear & windy.

Total Discharge: 9942647 gal 58127 ÷3 **Mag Gauge Flow:** 1.0 (0.50-1.0)

Daily Discharge 19,375 gal **System Status:** on (Arrival)

AST Pressure: 32.6 in WC

Oxidizer Main Temp: 674.9 °F **System Status:** on (Departure)

Oxidizer High Temp: 468.3 °F **Sample Collected:** NO

Element Temp: 803 °F **Bag Filters Replaced:** NO

Room Temp: 53.4 °F **Cartridge Filters Replaced:** NO

Inf water PH 7.68 PH

Inf Bag Filter DP: 0/0 0/0 PSI **Remianing Cartridge Filters:** 0

Eff Bag Filter DP: 0/0 0/0 PSI **Surge Counter:** 231

Remaining Bag Filters: 54 # **Defoamer level:** full

Run Times (hours)

Inlet pump 8028 AST Pump 4816 MS Pump 152

AST Blower 14901 Outlet Pump 6919 GW Pumps 6511

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-10-17 **Time:** _____

Temp: 22° Mostly cloudy.

Total Discharge: 9884520 gal

Daily Discharge 19,276 gal

AST Pressure: 33.9 in WC

Oxidizer Main Temp: 663.0 °F

Oxidizer High Temp: 477.2 °F

Element Temp: 810. °F

Room Temp: 39.2 °F

Inf water PH 7.68 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 54 #

Mag Gauge Flow: 1.00 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: Ø

Surge Counter: 231

Defoamer level: full

Run Times (hours)

Inlet pump 8007 AST Pump 4791 MS Pump 152

AST Blower 14828 Outlet Pump 6868 GW Pumps 6446

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-9-17 **Time:** 0730

Temp: 34° Snowing

Total Discharge: 9865244 gal

Daily Discharge 19,787 gal

AST Pressure: 32.3 in WC

Oxidizer Main Temp: 677.2 °F

Oxidizer High Temp: 481.9 °F

Element Temp: 831.0 °F

Room Temp: 57.2 °F

Inf water PH 7.66 pH (7.0-9.0)

Inf Bag Filter DP: o/o o/o PSI

Inf Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 56 #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: Yes

Cartridge Filters Replaced: 0

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 7 gals.

Run Times (hours)

Inlet pump 8000 AST Pump 4783 MS Pump 152

AST Blower 14804 Outlet Pump 6851 GW Pumps

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-8-17 **Time:** 0930

Temp: 59° Partly Cloudy

Total Discharge: 9845457 gal

Daily Discharge 19,104 gal

AST Pressure: 31.0 in WC

Oxidizer Main Temp: 660.5 °F

Oxidizer High Temp: 466.9 °F

Element Temp: 836 °F

Room Temp: 62.5 °F

Inf water PH 7.68 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 60 #

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: ~~YES~~ N

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: full

Run Times (hours)

Inlet pump 7993 AST Pump 4775 MS Pump 152

AST Blower 14780 Outlet Pump 6834 GW Pumps 6402

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-7-17 **Time:** 0900

Temp: 44° Mostly Sunny

Total Discharge: 9826353 gal

Daily Discharge 19,630 gal

AST Pressure: 32.0 in WC

Oxidizer Main Temp: 675.6 °F

Oxidizer High Temp: 475.0 °F

Element Temp: 840.0 °F

Room Temp: 61.0 °F

Inf water PH _____ pH (7.0-9.0)

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 60 #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: _____

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: full

Run Times (hours)

Inlet pump 7987 AST Pump 4766 MS Pump 152

AST Blower 14756 Outlet Pump 6817 GW Pumps 6380

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2-6-17 **Time:** 0930

Temp: 35° SUNNY.

Total Discharge: 9806723 gal 56689 ÷3

Mag Gauge Flow: 1.20 (0.50-1.0)

Daily Discharge 18,896 gal

System Status: ON (Arrival)

AST Pressure: 32.8 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 648.3 °F

Oxidizer High Temp: 476.4 °F

Sample Collected: NO

Element Temp: 880. °F

Bag Filters Replaced: NO

Room Temp: 58.3 °F

Cartridge Filters Replaced: NO

Inf water PH 7.82 pH (7.0-9.0)

Remianing Cartridge Filters: 0

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Surge Counter: 231

Remaining Bag Filters: 60 #

Defoamer level: 9 gals.

Run Times (hours)

Inlet pump 7980 AST Pump 4758 MS Pump 152

AST Blower 14732 Outlet Pump 6801 GW Pumps 6358

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2/3/17 **Time:** 0945

Temp: 33°

Total Discharge:	9750034 gal	**Mag Gauge Flow:**	1.25 (0.50-1.0)
Daily Discharge	19,665 gal	**System Status:** (Arrival)	On
AST Pressure:	33.0 in WC	**System Status:** (Departure)	On
Oxidizer Main Temp:	649.9 °F		
Oxidizer High Temp:	472.1 °F	**Sample Collected:**	N
Element Temp:	882 °F	**Bag Filters Replaced:**	Y
Room Temp:	55.2 °F	**Cartridge Filters Replaced:**	N
Inf water PH	7.76 pH (7.0-9.0)	**Remianing Cartridge Filters:**	N
Inf Bag Filter DP:	0/0 PSI		
Eff Bag Filter DP:	0/0 PSI	**Surge Counter:**	231
Remaining Bag Filters:	~20 #	**Defoamer level:**	~10 Gallons

Run Times (hours)

Inlet pump 7960 AST Pump 4736 MS Pump 152

AST Blower 14663 Outlet Pump 6753 GW Pumps 6296

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2/2/2017 **Time:** 0945

Temp: 43°F

Total Discharge:	9730369 gal	**Mag Gauge Flow:**	1.25 (0.50-1.0)
Daily Discharge	19,886 gal	**System Status: (Arrival)**	On
AST Pressure:	32.2 in WC	**System Status: (Departure)**	On
Oxidizer Main Temp:	678.2 °F		
Oxidizer High Temp:	466.1 °F	**Sample Collected:**	N
Element Temp:	877 °F	**Bag Filters Replaced:**	N
Room Temp:	58.3 °F	**Cartridge Filters Replaced:**	N
Inf water PH	7.70 pH (7.0-9.0)	**Remianing Cartridge Filters:**	~~0~~
Inf Bag Filter DP:	0/0 PSI		
Eff Bag Filter DP:	0/0 PSI	**Surge Counter:**	231
Remaining Bag Filters:	~20 #	**Defoamer level:**	~5 Gallons

Run Times (hours)

Inlet pump 7953	AST Pump 4728	MS Pump 152
AST Blower 14639	Outlet Pump 6736	GW Pumps 6274

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 2/1/17 **Time:** 0940

Temp: 43

Total Discharge: 9710483 gal

Daily Discharge 19,717 gal

AST Pressure: 32.0 in WC

Oxidizer Main Temp: 659.7 °F

Oxidizer High Temp: 474.0 °F

Element Temp: 885 °F

Room Temp: 58.9 °F

Inf water PH 7.49 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: ~20 #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 26 Gallons

Run Times (hours)

Inlet pump 7946 AST Pump 4720 MS Pump 152

AST Blower 14615 Outlet Pump 6718 GW Pumps 6252

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 2-28-17 **Time:** 0900

Temp: 44° cloudy

SVE Process Vacuum: 32.5 in WC

Sparge PSI: 9.2 PSI

SVE Process Flow: 1.3 SCFM

Sparge Temp: 75 °F

Control Room Temp: 45 °F

XP Room Temp: 50 °F

System Status: (Arrival) OFF

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: NOT on screen

Sparge Run Time: NOT ON SCREEN

Maintenance Work Performed, Adjustments Made and Comments:

alarm - phase loss - reset

Cell 3 AS/SVE System Data Log

Date: 2-28-17 **Time:** 0820

Temp: 34+ °

SVE Process Vacuum:	31.1	in WC	**System Status: (Arrival)**	OFF
Sparge PSI:	8.7	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	80.0	°F	**Air Sample Collected:**	NO
Control Room Temp:	51	°F	**SVE Run Time:**	NOT on SCREEN
XP Room Temp:	79	°F	**Sparge Run Time:**	NOT ON SCREEN

Maintenance Work Performed, Adjustments Made and Comments:

alarm system - phase loss -
No electric to system - 8:20 am

11:10 electric backon
restarted the system.

Cell 3 AS/SVE System Data Log

Date: 2-23-17 **Time:** 0900

Temp: 47° clear

SVE Process Vacuum: 35.8 in WC

Sparge PSI: 9.7 PSI

SVE Process Flow: 1.5 SCFM

Sparge Temp: 103.4 °F

Control Room Temp: 61 °F

XP Room Temp: 61 F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

SVE Run Time: NOT on SCREEN

Sparge Run Time: " " "

Maintenance Work Performed, Adjustments Made and Comments:

NES NATIONAL ENVIRONMENTAL SYSTEMS

02/23/17

PROCESS DATA

02:49 PM

MAIN MENU

PROCESS ROOM TEMPERATURE 61 F	SVE VACUUM 35.8 IN WC	SPARGE FLOW 1.5 IN WC
CONTROL ROOM TEMPERATURE 61 F	SPARGE DISCHARGE TEMPERATURE 103.4 F	SPARGE PRESSURE 9.7 PSI

Cell 3 AS/SVE System Data Log

Date: 2-24-17 **Time:** 0800

Temp: 52°

SVE Process Vacuum:	38.0	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.7	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	82.7	°F	**Air Sample Collected:**	No
Control Room Temp:	51.	°F	**SVE Run Time:**	—
XP Room Temp:	52.	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

NES
NATIONAL ENVIRONMENTAL SYSTEMS

02/24/17 **PROCESS DATA** 07:50 AM

MAIN MENU

PROCESS ROOM TEMPERATURE	SVE VACUUM	SPARGE FLOW
52 F	38.0 IN WC	1.6 IN WC
CONTROL ROOM TEMPERATURE	**SPARGE DISCHARGE TEMPERATURE**	**SPARGE PRESSURE**
51 F	82.7 F	8.7 PSI

NES NATIONAL ENVIRONMENTAL SYSTEMS

cell 3 ON – system running g[illegible]d

02/22/17

PROCESS DATA

07:14 AM

MAIN MENU

PROCESS ROOM TEMPERATURE	SVE VACUUM	SPARGE FLOW
49 F	37.3 IN WC	1.6 IN WC
CONTROL ROOM TEMPERATURE	**SPARGE DISCHARGE TEMPERATURE**	**SPARGE PRESSURE**
48 F	75.2 F	8.1 PSI

NES 3
NATIONAL ENVIRONMENTAL SYSTEMS ON

02/21/17 **PROCESS DATA** 07:10 AM

MAIN MENU

PROCESS ROOM TEMPERATURE	SVE VACUUM	SPARGE FLOW
46 F	30.1 IN WC	1.5 IN WC
CONTROL ROOM TEMPERATURE	**SPARGE DISCHARGE TEMPERATURE**	**SPARGE PRESSURE**
40 F	44.6 F	9.4 PSI

NES cell 3 System on.

NATIONAL ENVIRONMENTAL SYSTEMS

02/20/17

PROCESS DATA

07:38 AM

MAIN MENU

PROCESS ROOM TEMPERATURE 49 F	SVE VACUUM 32.4 IN WC	SPARGE FLOW 1.6 IN WC
CONTROL ROOM TEMPERATURE 42 F	SPARGE DISCHARGE TEMPERATURE 55.5 F	SPARGE PRESSURE 8.8 PSI

NES NATIONAL ENVIRONMENTAL SYSTEMS

System scheduled OFF

02/17/17

PROCESS DATA

06:51 AM

MAIN MENU

PROCESS ROOM TEMPERATURE 40 F	SVE VACUUM 0.0 IN WC	SPARGE FLOW 0.0 IN WC
CONTROL ROOM TEMPERATURE 34 F	SPARGE DISCHARGE TEMPERATURE 32.0 F	SPARGE PRESSURE 0.0 PSI

NES 3 ON
NATIONAL ENVIRONMENTAL SYSTEMS

02/16/17

PROCESS DATA

06:58 AM

MAIN MENU

PROCESS ROOM TEMPERATURE	SVE VACUUM	SPARGE FLOW
42 F	39.5 IN WC	1.7 IN WC
CONTROL ROOM TEMPERATURE	**SPARGE DISCHARGE TEMPERATURE**	**SPARGE PRESSURE**
41 F	57.5 F	7.1 PSI

NES 3
NATIONAL ENVIRONMENTAL SYSTEMS

02/15/17

PROCESS DATA

07:12 AM

MAIN MENU

PROCESS ROOM TEMPERATURE	SVE VACUUM	SPARGE FLOW
46 F	1.3 IN WC	0.0 IN WC
CONTROL ROOM TEMPERATURE	**SPARGE DISCHARGE TEMPERATURE**	**SPARGE PRESSURE**
40 F	40.8 F	0.0 PSI

1/01 02/14/17 11:47 PM PHASE LOSS ALARM

NES 3
NATIONAL ENVIRONMENTAL SYSTEMS

02/14/17

PROCESS DATA

06:56 AM

MAIN MENU

PROCESS ROOM TEMPERATURE 45 F	SVE VACUUM 44.9 IN WC	SPARGE FLOW 1.7 IN WC
CONTROL ROOM TEMPERATURE 42 F	SPARGE DISCHARGE TEMPERATURE 62.8 F	SPARGE PRESSURE 7.1 PSI

NES
NATIONAL ENVIRONMENTAL SYSTEMS

02/13/17

PROCESS DATA

07:51 AM

MAIN MENU

PROCESS ROOM TEMPERATURE 44 F	SVE VACUUM 39.1 IN WC	SPARGE FLOW 1.7 IN WC
CONTROL ROOM TEMPERATURE 43 F	SPARGE DISCHARGE TEMPERATURE 61.7 F	SPARGE PRESSURE 7.4 PSI

NES NATIONAL ENVIRONMENTAL SYSTEMS

cell 3

02/10/17

PROCESS DATA

07:54 AM

MAIN MENU

PROCESS ROOM TEMPERATURE 39 F	SVE VACUUM 57.5 IN WC	SPARGE FLOW 1.7 IN WC
CONTROL ROOM TEMPERATURE 37 F	SPARGE DISCHARGE TEMPERATURE 51.6 F	SPARGE PRESSURE 6.5 PSI

Cell 3 AS/SVE System Data Log

Date: 2-9-17 **Time:** 1230 hrs

Temp: 34° SNOWING

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF.
(Departure)

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

NES tech still working on unit.

Cell 3 AS/SVE System Data Log

Date: 2-8-17 **Time:** 1030

Temp: 59° partly cloudy.

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad

Cell 3 AS/SVE System Data Log

Date: 2-7-17 **Time:** 1000

Temp: 44° mostly cloudy

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

PLC NOT working

Cell 3 AS/SVE System Data Log

Date: 2-6-17 **Time:** 1030

Temp: 35° Sunny

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) OFF

System Status: (Departure) OFF.

Air Sample Collected: No

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

PLC not working

Date: 2/3/17 **Time:** 0930

Temp: 43°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) _____

System Status: (Departure) _____

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

PLC not working – Waiting for parts

Date: 2/2/17 **Time:** 0930

Temp: 43°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) _____

System Status: (Departure) _____

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

PLC not working – Waiting for parts

Date: 2/1/17 **Time:** 0930

Temp: 43°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: _____ (Arrival)

System Status: _____ (Departure)

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

PLC not working – Waiting for parts

Cell 5 GW Pump and Treat System Data Log

Date: 2-28-1 **Time:** _____

Temp: 44°

Total Discharge: 10644636 Gal

Daily Discharge: 18,402 Gal

AST Pressure: 60.2 in WC

Dual Phase Vacuum: 19.7 in WC

Dual Phase Temp: 105 °F

XP Room Temp: 72 °F

AST water PH 9.0 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.65 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 20 #

Surge Counter: 12,168

Remaining Defoamer: 6 gals.

Run Times NOT on screen —

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

NES
NATIONAL ENVIRONMENTAL SYSTEMS

02/28/17 **ALARM HISTORY** 07:44 AM

MAIN MENU

ALARM RESET

Alarm Summary — Total of 64 Alarms

Message		Activated	Deactivated
02/28/17 07:33 AM MOISTURE SEPARATOR HIGH LEVEL ALARM			
02/28/17 07:30 AM INLET TANK HIGH LEVEL ALARM	3	02/28/17 07:30 AM	02/28/17 07:43 AM
02/28/17 07:16 AM AIR STRIPPER HIGH LEVEL ALARM	2	02/28/17 07:16 AM	02/28/17 07:32 AM
02/28/17 07:15 AM OUTLET TANK HIGH LEVEL ALARM	1	02/28/17 07:15 AM	02/28/17 07:31 AM
02/28/17 06:50 AM MOISTURE SEPARATOR HIGH LEVEL ALARM			02/28/17 07:01 AM
02/28/17 06:47 AM INLET TANK HIGH LEVEL ALARM	3	02/28/17 06:47 AM	02/28/17 07:00 AM
02/28/17 06:33 AM AIR STRIPPER HIGH LEVEL ALARM	2	02/28/17 06:33 AM	02/28/17 06:49 AM
02/28/17 06:32 AM OUTLET TANK HIGH LEVEL ALARM	1	02/28/17 06:32 AM	02/28/17 06:48 AM
02/28/17 06:08 AM MOISTURE SEPARATOR HIGH LEVEL ALARM			02/28/17 06:19 AM
02/28/17 06:05 AM INLET TANK HIGH LEVEL ALARM	3	02/28/17 06:05 AM	02/28/17 06:18 AM
02/28/17 05:51 AM AIR STRIPPER HIGH LEVEL ALARM	2	02/28/17 05:51 AM	02/28/17 06:07 AM
02/28/17 05:49 AM OUTLET TANK HIGH LEVEL ALARM	1	02/28/17 05:49 AM	02/28/17 06:06 AM

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1/01 02/28/17 07:33 AM MOISTURE SEPARATOR HIGH LEVEL ALARM

Cell 5 GW Pump and Treat System Data Log

Date: 2-27-17 **Time:** 1110

Temp: 34° cloudy.

Total Discharge: 10626237 Gal 15847 ÷3

Daily Discharge: 5282 Gal

AST Pressure: 58.4 in WC

Dual Phase Vacuum: 0.0 in WC

Dual Phase Temp: 44 °F

XP Room Temp: 56 °F

AST water PH 8.0 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 50 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 20 #

Surge Counter: 12,168

Remaining Defoamer: 6 gals.

Programing issues — in work

Run Times

Not Available

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 1-24-14 **Time:** 1000

Temp: 53° clear

Total Discharge: 10610390 Gal

Daily Discharge: 3778 Gal

AST Pressure: 58.3 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 103 °F

XP Room Temp: 70° °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 50 #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 20 #

Surge Counter: 12,168

Remaining Defoamer: 8 gals.

Run Times NOT available

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

NATIONAL ENVIRONMENTAL SYSTEMS

02/24/17 **ALARM HISTORY** 12:02 PM

MAIN MENU

ALARM RESET

Alarm Summary — Total of 19 Alarms

Message	Activated	Deactivated
02/24/17 11:19 AM OUTLET TANK HIGH LEVEL ALARM	02/24/17 11:19 AM	02/24/17 11:33 AM
02/24/17 10:34 AM OUTLET TANK HIGH LEVEL ALARM	02/24/17 10:34 AM	02/24/17 10:49 AM
02/23/17 03:04 PM AIR STRIPPER HIGH LEVEL ALARM	02/23/17 03:04 PM	02/24/17 09:49 AM
02/23/17 02:42 PM OUTLET TANK HIGH LEVEL ALARM	02/23/17 02:42 PM	02/23/17 03:00 PM
02/23/17 07:57 AM OUTLET TANK HIGH LEVEL ALARM	02/23/17 07:57 AM	02/23/17 01:58 PM
02/22/17 03:16 PM OUTLET TANK HIGH LEVEL ALARM	02/22/17 03:16 PM	02/23/17 07:11 AM
02/22/17 02:00 PM OUTLET TANK HIGH LEVEL ALARM	02/22/17 02:00 PM	02/22/17 02:41 PM
02/22/17 01:02 PM OUTLET TANK HIGH LEVEL ALARM	02/22/17 01:02 PM	02/22/17 01:11 PM
02/22/17 10:01 AM OUTLET TANK HIGH LEVEL ALARM	02/22/17 10:01 AM	02/22/17 00:18 PM
02/21/17 04:11 PM OUTLET TANK HIGH LEVEL ALARM	02/21/17 04:11 PM	02/22/17 09:12 AM
02/21/17 12:04 PM OUTLET TANK HIGH LEVEL ALARM	02/21/17 00:04 PM	02/21/17 03:17 PM
02/21/17 10:52 AM MOISTURE SEPARATOR HIGH LEVEL ALARM		02/21/17 11:11 AM

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Cell 5 GW Pump and Treat System Data Log

Date: 2-23-17 **Time:** 0700

Temp: 47° Foggy

Total Discharge: 10606612 Gal

Daily Discharge: 3977 Gal

AST Pressure: 59.9 in WC

Dual Phase Vacuum: 20.8 in WC

Dual Phase Temp: 72° °F

XP Room Temp: 67° °F

AST water PH 8.20 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: — #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) OFF.

System Status: (Departure) OFF. shut down 3:05pm.

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge — #

Surge Counter: 12,168

Remaining Defoamer: 9 gals.

Run Times — ? No screen showing this

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

reset 0713 2/23/17. — outlet tank high level alarm keeps shutting unit down program adjustment due on Fri. 2/24/17

NATIONAL ENVIRONMENTAL SYSTEMS

02/23/17

PROCESS DATA

03:05 PM

MAIN MENU

DUAL PHASE VACUUM	DUAL PHASE TEMPERATURE	AIR STRIPPER PRESSURE
0.0 IN HG	105 F	1.9 IN WC

PROCESS ROOM TEMPERATURE	CONTROL ROOM TEMPERATURE
77 F	72 F

TOTAL DISCHARGE
10608392 GALLONS

1/01 02/23/17 03:04 PM AIR STRIPPER HIGH LEVEL ALARM

NATIONAL ENVIRONMENTAL SYSTEMS

02/22/17 **ALARM HISTORY** 12:47 PM

MAIN MENU

ALARM RESET

program issue - will resolve Fri 2-24-17.

Alarm Summary — Total of 11 Alarms

Message	Activated	Deactivated
02/22/17 10:01 AM OUTLET TANK HIGH LEVEL ALARM	02/22/17 10:01 AM	02/22/17 00:18 PM
02/21/17 04:11 PM OUTLET TANK HIGH LEVEL ALARM	02/21/17 04:11 PM	02/22/17 09:12 AM
02/21/17 12:04 PM OUTLET TANK HIGH LEVEL ALARM	02/21/17 00:04 PM	02/21/17 03:17 PM
02/21/17 10:52 AM MOISTURE SEPARATOR HIGH LEVEL ALARM		02/21/17 11:11 AM
02/20/17 08:17 AM MOISTURE SEPARATOR HIGH LEVEL ALARM		02/21/17 10:51 AM
02/20/17 08:15 AM MOISTURE SEPARATOR HIGH LEVEL ALARM		02/20/17 08:17 AM
02/17/17 11:44 AM MOISTURE SEPARATOR HIGH LEVEL ALARM		02/20/17 08:14 AM
02/10/17 08:34 AM DUAL PHASE BLOWER LOW VACUUM ALARM		02/10/17 08:36 AM
02/10/17 08:31 AM DUAL PHASE BLOWER LOW VACUUM ALARM		02/10/17 08:33 AM
02/10/17 08:30 AM PHASE LOSS ALARM	02/10/17 08:30 AM	02/10/17 08:31 AM
02/10/17 08:22 AM AIR STRIPPER HIGH LEVEL ALARM	02/10/17 08:22 AM	02/10/17 08:31 AM

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NES 5
NATIONAL ENVIRONMENTAL SYSTEMS OFF.

02/21/17 **ALARM HISTORY** 07:14 AM

MAIN MENU

ALARM RESET

Alarm Summary — Total of 7 Alarms

Message	Activated	Deactivated
02/20/17 08:17 AM MOISTURE SEPARATOR HIGH LEVEL ALARM replacing pump. (e)		
02/20/17 08:15 AM MOISTURE SEPARATOR HIGH LEVEL ALARM		02/20/17 08:17 AM
02/17/17 11:44 AM MOISTURE SEPARATOR HIGH LEVEL ALARM		02/20/17 08:14 AM
02/10/17 08:34 AM DUAL PHASE BLOWER LOW VACUUM ALARM		02/10/17 08:36 AM
02/10/17 08:31 AM DUAL PHASE BLOWER LOW VACUUM ALARM		02/10/17 08:33 AM
02/10/17 08:30 AM PHASE LOSS ALARM	02/10/17 08:30 AM	02/10/17 08:31 AM
02/10/17 08:22 AM AIR STRIPPER HIGH LEVEL ALARM	02/10/17 08:22 AM	02/10/17 08:31 AM

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01 02/20/17 08:17 AM MOISTURE SEPARATOR HIGH LEVEL ALARM

NATIONAL ENVIRONMENTAL SYSTEMS

02/20/17 **ALARM HISTORY** 07:48 AM

MAIN MENU

ALARM RESET

Alarm Summary		Total of 5 Alarms
Message	Activated	Deactivated
02/17/17 11:44 AM MOISTURE SEPARATOR HIGH LEVEL ALARM		
02/10/17 08:34 AM DUAL PHASE BLOWER LOW VACUUM ALARM		02/10/17 08:36 AM
02/10/17 08:31 AM DUAL PHASE BLOWER LOW VACUUM ALARM		02/10/17 08:33 AM
02/10/17 08:30 AM PHASE LOSS ALARM	02/10/17 08:30 AM	02/10/17 08:31 AM
02/10/17 08:22 AM AIR STRIPPER HIGH LEVEL ALARM	02/10/17 08:22 AM	02/10/17 08:31 AM

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01 02/17/17 11:44 AM MOISTURE SEPARATOR HIGH LEVEL ALARM

NES NATIONAL ENVIRONMENTAL SYSTEMS

System OFF for repairs

02/17/17

PROCESS DATA

06:54 AM

MAIN MENU

DUAL PHASE VACUUM	DUAL PHASE TEMPERATURE	AIR STRIPPER PRESSURE
0.0 IN HG	43 F	0.0 IN WC

PROCESS ROOM TEMPERATURE	CONTROL ROOM TEMPERATURE
56 F	56 F

TOTAL DISCHARGE
10599600 GALLONS

NES 5 off for repairs

NATIONAL ENVIRONMENTAL SYSTEMS

02/16/17 **PROCESS DATA** 07:05 AM

MAIN MENU

DUAL PHASE VACUUM	DUAL PHASE TEMPERATURE	AIR STRIPPER PRESSURE
0.0 IN HG	40 F	0.0 IN WC

PROCESS ROOM TEMPERATURE	CONTROL ROOM TEMPERATURE
55 F	56 F

TOTAL DISCHARGE
10599600 GALLONS

NES 5 off for repairs

NATIONAL ENVIRONMENTAL SYSTEMS

02/15/17 **PROCESS DATA** 07:16 AM

MAIN MENU

DUAL PHASE VACUUM	DUAL PHASE TEMPERATURE	AIR STRIPPER PRESSURE
0.2 IN HG	43 F	0.0 IN WC

PROCESS ROOM TEMPERATURE	CONTROL ROOM TEMPERATURE
56 F	57 F

TOTAL DISCHARGE
10599600 GALLONS

NES 5

NATIONAL ENVIRONMENTAL SYSTEMS

OFF for repairs

02/14/17 **PROCESS DATA** 06:58 AM

MAIN MENU

DUAL PHASE VACUUM	DUAL PHASE TEMPERATURE	AIR STRIPPER PRESSURE
0.0 IN HG	38 F	0.0 IN WC

PROCESS ROOM TEMPERATURE	CONTROL ROOM TEMPERATURE
52 F	56 F

TOTAL DISCHARGE
10599600 GALLONS

NATIONAL ENVIRONMENTAL SYSTEMS

off for repair

02/13/17 **PROCESS DATA** 07:43 AM

MAIN MENU

DUAL PHASE VACUUM	DUAL PHASE TEMPERATURE	AIR STRIPPER PRESSURE
0.0 IN HG	41 F	0.0 IN WC

PROCESS ROOM TEMPERATURE	CONTROL ROOM TEMPERATURE
55 F	56 F

TOTAL DISCHARGE
10599600 GALLONS

NES Cell 5

NATIONAL ENVIRONMENTAL SYSTEMS

02/10/17 **PROCESS DATA** 07:53 AM

MAIN MENU

DUAL PHASE VACUUM	DUAL PHASE TEMPERATURE	AIR STRIPPER PRESSURE
0.0 IN WC	39 F	0.0 IN WC

PROCESS ROOM TEMPERATURE	CONTROL ROOM TEMPERATURE
52 F	54 F

TOTAL DISCHARGE
10599594 GALLONS

01 02/09/17 08:17 PM AIR STRIPPER HIGH LEVEL ALARM

Cell 5 GW Pump and Treat System Data Log

Date: 2-9-17 **Time:** 0730

Temp: 34° snowing

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Ef[illegible]ag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) _____

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ **Outlet Pump**_____ **Booster Blower**_____

AST Blower_____ **MS Pump**_____ **Aeration Blower**_____

AST Pump_____ **Dual Phase**_____

Maintenance Work Performed, Adjustments Made and Comments:

Factory tech working on PLC.

Cell 5 GW Pump and Treat System Data Log

Date: 2-8-17 **Time:** 1030

Temp: 59° partly cloudy.

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ **Outlet Pump**_____ **Booster Blower**_____

AST Blower_____ **MS Pump**_____ **Aeration Blower**_____

AST Pump_____ **Dual Phase**_____

Maintenance Work Performed, Adjustments Made and Comments:

Factory working on repairing cell.

Date: 2/3/17 **Time:** 0930

Temp: 43°

Total Discharge: 10599590 **Gal**

Daily Discharge: _____ **Gal**

AST Pressure: _____ **in WC**

Dual Phase Vacuum: _____ **in WC**

Dual Phase Temp: _____ **°F**

XP Room Temp: _____ **°F**

AST water PH _____ **pH(7.0-9.0)**

Inf Bag Filter DP: _____ **PSI**

Eff Bag Filter DP: _____ **PSI**

Remaining Bag Filters: _____ **#**

Mag Gauge Flow: _____ **(1.50-2.00)**

System Status: (Arrival) _____

System Status: (Departure) _____

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ **#**

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ **Outlet Pump**_____ **Booster Blower**_____

AST Blower_____ **MS Pump**_____ **Aeration Blower**_____

AST Pump_____ **Dual Phase**_____

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad - waiting for parts

Date: 2/2/17 **Time:** 0930

Temp: 43°

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) _____

System Status: (Departure) _____

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ **Outlet Pump**_____ **Booster Blower**_____

AST Blower_____ **MS Pump**_____ **Aeration Blower**_____

AST Pump_____ **Dual Phase**_____

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad - waiting for parts

Date: 2/1/17 **Time:** 0930

Temp: 43°

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) _____

System Status: (Departure) _____

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ **Outlet Pump**_____ **Booster Blower**_____

AST Blower_____ **MS Pump**_____ **Aeration Blower**_____

AST Pump_____ **Dual Phase**_____

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad - waiting for parts

Cell 5 GW Pump and Treat System Data Log

Date: 2-7-17 **Time:** _____

Temp: 44° MOSTLY cloudy.

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF.

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ **Outlet Pump**_____ **Booster Blower**_____

AST Blower_____ **MS Pump**_____ **Aeration Blower**_____

AST Pump_____ **Dual Phase**_____

Maintenance Work Performed, Adjustments Made and Comments:

Cell #5

Date: 2-6-17 **Time:** 1100

Temp: 35° Sunny

Total Discharge: 10599590 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF.

Sample Collected: N

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ **Outlet Pump**_____ **Booster Blower**_____

AST Blower_____ **MS Pump**_____ **Aeration Blower**_____

AST Pump_____ **Dual Phase**_____

Maintenance Work Performed, Adjustments Made and Comments:

PLC bad -

NES tech working on system to repair now

Cell 2 AS/SVE System Data Log

Date: 3-31-17 **Time:** _____

Temp: 43° Rain

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 92 SCFM

Sparge Temp: 51 °F

System Status: ON – SVE only
(Arrival)

System Status: ON – SVE only
(Departure)

Air Sample Collected: NO

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-30-17 **Time:** _____

Temp: 42°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 93 SCFM

Sparge Temp: 62 °F

System Status: (Arrival) ON – SVE only

System Status: (Departure) ON – SVE only

Air Sample Collected: NO

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-29-17 **Time:** _____

Temp: 42°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 93 SCFM

Sparge Temp: 62 °F

System Status: (Arrival) ON – SVE only

System Status: (Departure) ON – SVE only

Air Sample Collected: NO

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-28-17 **Time:** _____

Temp: 53° cloudy.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 93 SCFM

Sparge Temp: 62 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-28-17 **Time:** _____

Temp: 53° raining

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 94 SCFM

Sparge Temp: 65 °F

System Status: ON- SVE only
(Arrival)

System Status: ON- SVE only
(Departure)

Air Sample Collected: NO

Sparge Run Time: —

Surge Counter: —

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-27-17 **Time:** _____

Temp: 46° rain

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 93 SCFM

Sparge Temp: 56 °F

System Status: ON SVE only
(Arrival)

System Status: ON SVE only
(Departure)

Air Sample Collected: No

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-24-17 **Time:** _____

Temp: 36° cloudy

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 91 SCFM

Sparge Temp: 41 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-27-17 **Time:** _____

Temp: 27° clear

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 90 SCFM

Sparge Temp: 36 °F

System Status: ON SVE only
(Arrival)

System Status: ON SVE only.
(Departure)

Air Sample Collected: No

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-22-17 **Time:** _____

Temp: 43°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 93 SCFM

Sparge Temp: 53 °F

System Status: ON – SVE only
(Arrival)

System Status: ON – SVE only
(Departure)

Air Sample Collected: NO

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-21-17 **Time:** _____

Temp: 44° Sunny

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 93 SCFM

Sparge Temp: 56 °F

System Status: SVE only – ON
(Arrival)

System Status: Sve only – ON
(Departure)

Air Sample Collected: No

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-20-17 **Time:** _____

Temp: 36°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 91 SCFM

Sparge Temp: 47 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-17-17 **Time:** _____

Temp: 27° clear

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 89 SCFM

Sparge Temp: 41 °F

System Status: (Arrival) SVE only

System Status: (Departure) SVE only

Air Sample Collected: No

Sparge Run Time: —

Surge Counter: —

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-16-17 **Time:** _____

Temp: 24° clear

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 86 SCFM

Sparge Temp: 33 °F

System Status: SVE only
(Arrival)

System Status: SVE only
(Departure)

Air Sample Collected: NO

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Sparge Pump locked up.

Cell 2 AS/SVE System Data Log

Date: 3-15-17 **Time:** _____

Temp: 22°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 30 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 84 SCFM

Sparge Temp: 30 °F

System Status: ON SVE only
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: –

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Sparge Pump locked up.

Cell 2 AS/SVE System Data Log

Date: 3-14-17 **Time:** _____

Temp: 30° SNOW

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 89 SCFM

Sparge Temp: 36 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: pump locked up

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Running SVE only

Cell 2 AS/SVE System Data Log

Date: 3-13-17 **Time:** _____

Temp: 23° clear

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 89 SCFM

Sparge Temp: 36 °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: No

Sparge Run Time: pump locked up

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Running SVE only

Cell 2 AS/SVE System Data Log

Date: 3-10-17 **Time:** _____

Temp: 44°

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF.
(Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Sparge pump locked up !
parts to be ordered

Cell 2 AS/SVE System Data Log

Date: 3-9-17 **Time:** _____

Temp: 50°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 93 SCFM

Sparge Temp: 87 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 237

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-8-17 **Time:** _____

Temp: 45°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 93 SCFM

Sparge Temp: 87 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 215

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-7-17 **Time:** _____

Temp: 45°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 94 SCFM

Sparge Temp: 87 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 190

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-6-17 **Time:** _____

Temp: 30° clear

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 90 SCFM

Sparge Temp: 72 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 166

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-3-17 **Time:** _____

Temp: 33° cloudy.

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 88 SCFM

Sparge Temp: 79. °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 96

Surge Counter: 287

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-2-17 **Time:** _____

Temp: 44° cloudy.

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 92 SCFM

Sparge Temp: 89. °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 70

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 3-1-17. **Time:** _____

Temp: 57° RAIN

Oxidizer Main Temp: ✓ °F

Oxidizer High Temp: ✓ °F

Element High Temp: ✓ °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 6 PSI

SVE Process Flow: 94 SCFM

Sparge Temp: 94 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 45.

Surge Counter: 287.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-29-17 / 3-30-17 **Time:** _____

Temp: 42°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

Unit down - stripper being cleaned

Cell 2 GW Pump and Treat System Data Log

Date: 3-28-17 **Time:** _____

Temp: 53° cloudy.

Total Discharge: 10714060 gal **Mag Gauge Flow:** _____ (0.50-1.0)

Daily Discharge 3560 gal **System Status:** ON (Arrival)

AST Pressure: _____ in WC **System Status:** OFF (Departure)

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F **Sample Collected:** _____

Element Temp: _____ °F **Bag Filters Replaced:** _____

Room Temp: _____ °F **Cartridge Filters Replaced:** _____

Inf water PH _____ PH **Remianing Cartridge Filters:** _____

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI **Surge Counter:** _____

Remaining Bag Filters: _____ # **Defoamer level:** _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

System down to clean the air stripper.
10AM. 3/28/17.

Cell 2 GW Pump and Treat System Data Log

Date: 3-28-17 **Time:** _____

Temp: 53° cloudy.

Total Discharge: 10710500 gal

Daily Discharge 15,850 gal

AST Pressure: 31.6 in WC

Oxidizer Main Temp: 664.1 °F

Oxidizer High Temp: 470.3 °F

Element Temp: 875 °F

Room Temp: 63.5 °F

Inf water PH 8.36 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 50 #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 232

Defoamer level: 9 gals.

Run Times (hours)

Inlet pump 8275 AST Pump 5132 MS Pump 152

AST Blower 15895 Outlet Pump 7611 GW Pumps 7414

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-27-17 **Time:** _____

Temp: 46° Raining

Total Discharge: 10694650 gal 53170 ÷3 **Mag Gauge Flow:** 1.25 (0.50-1.0)

Daily Discharge 17,723 gal **System Status:** ON (Arrival)

AST Pressure: 32.0 in WC

Oxidizer Main Temp: 645.6 °F **System Status:** ON (Departure)

Oxidizer High Temp: 466.7 °F **Sample Collected:** NO

Element Temp: 871 °F **Bag Filters Replaced:** NO

Room Temp: 62.2 °F **Cartridge Filters Replaced:** NO

Inf water PH 8.36 PH

Inf Bag Filter DP: o/o o/o PSI **Remianing Cartridge Filters:** 0

Eff Bag Filter DP: o/o o/o PSI **Surge Counter:** 232

Remaining Bag Filters: 50 # **Defoamer level:** full

Run Times (hours)

Inlet pump 8270 AST Pump 5125 MS Pump 152

AST Blower 15873 Outlet Pump 7597 GW Pumps 7393

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-24-17 **Time:** _____

Temp: 36° cloudy

Total Discharge:	10641480	gal	**Mag Gauge Flow:**	1.25	(0.50-1.0)
Daily Discharge	17,020	gal	**System Status: (Arrival)**	ON	
AST Pressure:	33.1	in WC	**System Status: (Departure)**	ON	
Oxidizer Main Temp:	648.3	°F			
Oxidizer High Temp:	465.1	°F	**Sample Collected:**	No	
Element Temp:	907	°F	**Bag Filters Replaced:**	yes	
Room Temp:	51.7	°F	**Cartridge Filters Replaced:**	No	
Inf water PH		PH	**Remianing Cartridge Filters:**	0	
Inf Bag Filter DP:	0/0 0/0	PSI			
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	232	
Remaining Bag Filters:	50	#	**Defoamer level:**	5 gals	

Run Times (hours)

Inlet pump	8251	AST Pump	5104	MS Pump	152
AST Blower	15799	Outlet Pump	7551	GW Pumps	7327

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-23-17 **Time:** _____

Temp: 27° clear

Total Discharge:	10624460	gal	**Mag Gauge Flow:**	1.25	(0.50-1.0)
Daily Discharge	14,770	gal	**System Status:** (Arrival)	OFF	
AST Pressure:	31.9	in WC	**System Status:** (Departure)	on	
Oxidizer Main Temp:	671.9	°F			
Oxidizer High Temp:	466.5	°F	**Sample Collected:**	No	
Element Temp:	908	°F	**Bag Filters Replaced:**	NO	
Room Temp:	48.4	°F	**Cartridge Filters Replaced:**	No	
Inf water PH	7.80	PH	**Remianing Cartridge Filters:**	0	
Inf Bag Filter DP:	0/0 0/0	PSI			
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	232	
Remaining Bag Filters:	54	#	**Defoamer level:**	6 gals.	

Run Times (hours)

Inlet pump 8245 AST Pump 5097 MS Pump 152

AST Blower 15776 Outlet Pump 7537 GW Pumps 7306

Maintenance Work Performed, Adjustments Made and Comments:

inlet tank high level alarm C

MS tank high level alarm C drained tank

Cell 2 GW Pump and Treat System Data Log

Date: 3-22-17 **Time:** _____

Temp: 43° sunny.

Total Discharge:	10609690	gal	**Mag Gauge Flow:**	1.25	(0.50-1.0)
Daily Discharge	14,420	gal	**System Status: (Arrival)**	ON	
AST Pressure:	31.9	in WC	**System Status: (Departure)**	ON	
Oxidizer Main Temp:	644.1	°F			
Oxidizer High Temp:	463.7	°F	**Sample Collected:**	NO	
Element Temp:	909	°F	**Bag Filters Replaced:**	NO	
Room Temp:	59.6	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	7.80	PH	**Remianing Cartridge Filters:**	~~0~~	
Inf Bag Filter DP:	0/0 0/0	PSI			
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	232	
Remaining Bag Filters:	54	#	**Defoamer level:**	7 gals.	

Run Times (hours)

Inlet pump 8421 AST Pump 5091 MS Pump 152

AST Blower 15756 Outlet Pump 7525 GW Pumps 7288

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-21-17 **Time:** _____

Temp: 44° cloudy.

Total Discharge:	10595270	gal	**Mag Gauge Flow:**	1.25	(0.50-1.0)
Daily Discharge	7160	gal	**System Status:** (Arrival)	OFF	
AST Pressure:	34.2	in WC	**System Status:** (Departure)	ON	
Oxidizer Main Temp:	658.9	°F			
Oxidizer High Temp:	458.0	°F	**Sample Collected:**	NO	
Element Temp:	901	°F	**Bag Filters Replaced:**	NO	
Room Temp:	61.9	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	7.85	PH			
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge Filters:**	0	
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	232	
Remaining Bag Filters:	54	#	**Defoamer level:**	8 gals.	

Run Times (hours)

Inlet pump 8236 AST Pump 5085 MS Pump 152

AST Blower 15737 Outlet Pump 7512 GW Pumps 7270

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-20-17 **Time:** _____

Temp: 36°

Total Discharge: 10588110 gal 47550 ÷3 **Mag Gauge Flow:** 1.25 (0.50-1.0)

Daily Discharge 15,850 gal **System Status:** ON (Arrival)

AST Pressure: 34.2 in WC

Oxidizer Main Temp: 662.3 °F **System Status:** ON (Departure)

Oxidizer High Temp: 464.8 °F **Sample Collected:** NO

Element Temp: 909 °F **Bag Filters Replaced:** yes

Room Temp: 56.1 °F **Cartridge Filters Replaced:** No

Inf water PH 7.89 PH **Remianing Cartridge Filters:** 0

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI **Surge Counter:** 231

Remaining Bag Filters: 54 # **Defoamer level:** 9 gals.

Run Times (hours)

Inlet pump 8234 AST Pump 5082 MS Pump 152

AST Blower 15728 Outlet Pump 7506 GW Pumps 7261

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-17-17 **Time:** _____

Temp: 27° clear

Total Discharge: 10540560 gal

Daily Discharge 17,750 gal

AST Pressure: 33.4 in WC

Oxidizer Main Temp: 668.1 °F

Oxidizer High Temp: 468.7 °F

Element Temp: 815 °F

Room Temp: 48.9 °F

Inf water PH 8.09 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 8 #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 10 gals.

Run Times (hours)

Inlet pump 8219 AST Pump 5063 MS Pump 152

AST Blower 15664 Outlet Pump 7463 GW Pumps 7203

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-16-17 **Time:** _____

Temp: 24° clear

Total Discharge:	10522810	gal	**Mag Gauge Flow:**	1.25	(0.50-1.0)
Daily Discharge	17,920	gal	**System Status: (Arrival)**	ON	
AST Pressure:	33.7	in WC	**System Status: (Departure)**	ON	
Oxidizer Main Temp:	665.5	°F			
Oxidizer High Temp:	480.8	°F	**Sample Collected:**	NO	
Element Temp:	794	°F	**Bag Filters Replaced:**	Yes	
Room Temp:	42.2	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	8.44	PH	**Remianing Cartridge Filters:**	~~0~~	
Inf Bag Filter DP:	d/o o/o	PSI			
Eff Bag Filter DP:	o/o o/o	PSI	**Surge Counter:**	231	
Remaining Bag Filters:	22	#	**Defoamer level:**	5 gals.	

Run Times (hours)

Inlet pump 8214 AST Pump 5056 MS Pump 152

AST Blower 15640 Outlet Pump 7447 GW Pumps 7181

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-15-17 **Time:** _____

Temp: 22°

Total Discharge: 10504890 gal

Daily Discharge 19,390 gal

AST Pressure: 33.6 in WC

Oxidizer Main Temp: 651.1 °F

Oxidizer High Temp: 470.6 °F

Element Temp: 811 °F

Room Temp: 41.2 °F

Inf water PH _____ PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 22 #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 6 gals.

Run Times (hours)

Inlet pump 8209 AST Pump 5049 MS Pump 152

AST Blower 15616 Outlet Pump 7431 GW Pumps 7160

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-14-17 **Time:** _____

Temp: 30° SNOW

Total Discharge: 10489900 gal

Daily Discharge 20,820 gal

AST Pressure: 32.3 in WC

Oxidizer Main Temp: 648.3 °F

Oxidizer High Temp: 463.9 °F

Element Temp: 803 °F

Room Temp: 52.9 °F

Inf water PH _____ PH

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 22 #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: Ø

Surge Counter: 231

Defoamer level: 7 gals.

Run Times (hours)

Inlet pump 8204 AST Pump 5044 MS Pump 152

AST Blower 15596 Outlet Pump 7418 GW Pumps 7141

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-13-17 **Time:** 1230

Temp: 23° clear

Total Discharge: 10469170 gal 53210 ÷ 3 **Mag Gauge Flow:** 1.25 (0.50-1.0)

Daily Discharge 17,736 gal **System Status:** ON (Arrival)

AST Pressure: 33.9 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 655.6 °F

Oxidizer High Temp: 469.6 °F **Sample Collected:** No

Element Temp: 805 °F **Bag Filters Replaced:** yes

Room Temp: 51.9 °F **Cartridge Filters Replaced:** No

Inf water PH 8.33 PH

Remianing Cartridge Filters: 0

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI **Surge Counter:** 231

Remaining Bag Filters: 22 # **Defoamer level:** 8 gals

Run Times (hours)

Inlet pump 8198 AST Pump 5036 MS Pump 152

AST Blower 15569 Outlet Pump 7399 GW Pumps 7116

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-10-17 **Time:** _____

Temp: 44°

Total Discharge: 10415960 gal

Daily Discharge 18,340 gal

AST Pressure: 31.9 in WC

Oxidizer Main Temp: 680.1 °F

Oxidizer High Temp: 466.3 °F

Element Temp: _____ °F

Room Temp: 62.3 °F

Inf water PH _____ PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-9-17 **Time:** _____

Temp: 50° clear

Total Discharge: 10397620 gal

Daily Discharge 17,370 gal

AST Pressure: 32.0 in WC

Oxidizer Main Temp: 679.5 °F

Oxidizer High Temp: 465.3 °F

Element Temp: 812 °F

Room Temp: 58.3 °F

Inf water PH _____ PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.20 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge Filters: Ø

Surge Counter: 231

Defoamer level: 4 gals.

Run Times (hours)

Inlet pump 8176 AST Pump 5007 MS Pump 152

AST Blower 15473 Outlet Pump 7332 GW Pumps 7030

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-8-17 **Time:** _____

Temp: 48° cloudy

Total Discharge: 10380250 gal

Daily Discharge 18,390 gal

AST Pressure: 32.0 in WC

Oxidizer Main Temp: 656.9 °F

Oxidizer High Temp: 469.1 °F

Element Temp: 813 °F

Room Temp: 62.9 °F

Inf water PH _____ PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 32 #

Mag Gauge Flow: 1.20 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge Filters: Ø

Surge Counter: 231

Defoamer level: 4 gals.

Run Times (hours)

Inlet pump 8171 AST Pump 5000 MS Pump 152

AST Blower 15450 Outlet Pump 7316 GW Pumps 7009

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-7-17 **Time:** _____

Temp: 45° cloudy.

Total Discharge: 10361860 gal

Daily Discharge 17,860 gal

AST Pressure: 32.2 in WC

Oxidizer Main Temp: 668.6 °F

Oxidizer High Temp: 471.5 °F

Element Temp: 813 °F

Room Temp: 62.7 °F

Inf water PH 8.12 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 32 #

Mag Gauge Flow: 1.20 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 5 gals.

Run Times (hours)

Inlet pump 8165 AST Pump 4993 MS Pump 152

AST Blower 15426 Outlet Pump 7299 GW Pumps 6987.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-6-17 **Time:** _____

Temp: 30° clear

Total Discharge: 10344000 gal 55280 ÷3 **Mag Gauge Flow:** 1.20 (0.50-1.0)

Daily Discharge 18,426 gal **System Status:** ON (Arrival)

AST Pressure: 33.4 in WC

Oxidizer Main Temp: 674.8 °F **System Status:** ON (Departure)

Oxidizer High Temp: 465.5 °F **Sample Collected:** No

Element Temp: 831 °F **Bag Filters Replaced:** yes

Room Temp: 54.7 °F **Cartridge Filters Replaced:** yes

Inf water PH 8.20 PH **Remianing Cartridge Filters:** 0

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI **Surge Counter:** 231

Remaining Bag Filters: 32 # **Defoamer level:** 6 gals.

Run Times (hours)

Inlet pump 8159 AST Pump 4986 MS Pump 152

AST Blower 15402 Outlet Pump 7283 GW Pumps 6965

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-3-17 **Time:** _____

Temp: 33° cloudy.

Total Discharge:	10288720	gal	**Mag Gauge Flow:**	1.00	(0.50-1.0)
Daily Discharge	18,980	gal	**System Status: (Arrival)**	ON	
AST Pressure:	33.2	in WC			
Oxidizer Main Temp:	669.8	°F	**System Status: (Departure)**	ON	
Oxidizer High Temp:	468.1	°F	**Sample Collected:**	NO	
Element Temp:	836	°F	**Bag Filters Replaced:**	NO	
Room Temp:	51.1	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	7.63	PH			
Inf Bag Filter DP:	o/o o/o	PSI	**Remianing Cartridge Filters:**	Ø	
Eff Bag Filter DP:	o/o o/o	PSI	**Surge Counter:**	231	
Remaining Bag Filters:	36	#	**Defoamer level:**	7 gals.	

Run Times (hours)

Inlet pump 8142 AST Pump 4963 MS Pump 152

AST Blower 15329 Outlet Pump 7233 GW Pumps 6899.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-2-17 **Time:** _____

Temp: 44° cloudy/windy

Total Discharge: 10269740 gal

Daily Discharge 19,440 gal

AST Pressure: 32.0 in WC

Oxidizer Main Temp: 662.7 °F

Oxidizer High Temp: 469.7 °F

Element Temp: 836 °F

Room Temp: 58.1 °F

Inf water PH 7.63 PH

Inf Bag Filter DP: do do PSI

Eff Bag Filter DP: do do PSI

Remaining Bag Filters: 36 #

Mag Gauge Flow: 1.00 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: Ø

Surge Counter: 231

Defoamer level: 8 gals. added defoamer

Run Times (hours)

Inlet pump 8137 AST Pump 4956 MS Pump 152

AST Blower 15306 Outlet Pump 7216 GW Pumps 6878

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 3-1-17 **Time:** 0830

Temp: 57° RAIN

Total Discharge: 10250300 gal

Daily Discharge 18,999 gal

AST Pressure: 31.7 in WC

Oxidizer Main Temp: 672.6 °F

Oxidizer High Temp: 470.5 °F

Element Temp: 836 °F

Room Temp: 60.1 °F

Inf water PH 7.63 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 40 #

Mag Gauge Flow: 1.00 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 231

Defoamer level: 5 gals.

Run Times (hours)

Inlet pump 8130 AST Pump 4948 MS Pump 152

AST Blower 15282 Outlet Pump 7198 GW Pumps 6856

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 AS/SVE System Data Log

Date: 3-31-17 **Time:** _____

Temp: 43° Rain

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) OFF *

System Status: (Departure) OFF

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

* NO ELECTRIC

Sparge not running

Cell 3 AS/SVE System Data Log

Date: 3-30-17 **Time:** _____

Temp: 42° cloudy.

SVE Process Vacuum:	39.0	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	7.9	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	61.5	°F	**Air Sample Collected:**	NO
Control Room Temp:	44	°F	**SVE Run Time:**	—
XP Room Temp:	61.3	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

OK [X]

Application EA-HTTP.exe encountered a serious error and must shut down.

(Could not close or OK this reading from my office computer. I went to the system & closed out the alarm. System left running no issues ?)

Cell 5 AS/SVE System Data Log

Date: 3-29-17 **Time:** _____

Temp: 42° cloudy

SVE Process Vacuum:	39.7	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.2	PSI		
SVE Process Flow:	1.6	SCFM	**System Status:** (Departure)	ON
Sparge Temp:	67.2	°F	**Air Sample Collected:**	NO
Control Room Temp:	47	°F	**SVE Run Time:**	—
XP Room Temp:	53	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-28-17 **Time:** _____

Temp: 53° cloudy.

SVE Process Vacuum:	39.8	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.2	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	67.2	°F	**Air Sample Collected:**	NO
Control Room Temp:	47.1	°F	**SVE Run Time:**	—
XP Room Temp:	51	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-28-17 **Time:** _____

Temp: 53° Rain

SVE Process Vacuum:	41.8	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.4	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	72.2	°F	**Air Sample Collected:**	NO
Control Room Temp:	49	°F	**SVE Run Time:**	—
XP Room Temp:	53	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-27-17 **Time:** _____

Temp: 46° Rain

SVE Process Vacuum:	40.9 in WC	**System Status: (Arrival)**	OFF
Sparge PSI:	9.9 PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.4 SCFM		
Sparge Temp:	56.6 °F	**Air Sample Collected:**	NO
Control Room Temp:	48 °F	**SVE Run Time:**	–
XP Room Temp:	63° °F	**Sparge Run Time:**	–

Maintenance Work Performed, Adjustments Made and Comments:

Sparge NOT running –
Went to the cell and found high voltage alarm
Shut sparge off

Rebooted the system & started – I got the
back system alarms back on the screen –

Left the system running – no issues

Cell 3 AS/SVE System Data Log

Date: 3-24-17 **Time:** _____

Temp: 36° cloudy.

SVE Process Vacuum:	29.0 in WC	**System Status: (Arrival)**	ON
Sparge PSI:	7.3 PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.7 SCFM		
Sparge Temp:	56.3 °F	**Air Sample Collected:**	NO
Control Room Temp:	42 °F	**SVE Run Time:**	–
XP Room Temp:	45 °F	**Sparge Run Time:**	–

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-23-17 **Time:** _____

Temp: 27° clear

SVE Process Vacuum:	23.9	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	6.3	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.7	SCFM		
Sparge Temp:	43.5	°F	**Air Sample Collected:**	No
Control Room Temp:	35	°F	**SVE Run Time:**	–
XP Room Temp:	39	°F	**Sparge Run Time:**	–

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-22-17 **Time:** _____

Temp: 43° SUNNY.

SVE Process Vacuum:	28.3	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	7.5	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.7	SCFM		
Sparge Temp:	62.0	°F	**Air Sample Collected:**	NO
Control Room Temp:	44.0	°F	**SVE Run Time:**	–
XP Room Temp:	46.0	°F	**Sparge Run Time:**	–

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-21-17 **Time:** _____

Temp: 44° cloudy.

SVE Process Vacuum:	31.0	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	7.8	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	66.8	°F	**Air Sample Collected:**	No
Control Room Temp:	45	°F	**SVE Run Time:**	–
XP Room Temp:	49	°F	**Sparge Run Time:**	–

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-20-17 **Time:** _____

Temp: 36°

SVE Process Vacuum:	28.4	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	7.0	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.7	SCFM		
Sparge Temp:	58.1	°F	**Air Sample Collected:**	NO
Control Room Temp:	41	°F	**SVE Run Time:**	—
XP Room Temp:	44	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-17-17 **Time:** _____

Temp: 27° clear

SVE Process Vacuum:	27.9	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	6.4	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.8	SCFM		
Sparge Temp:	53.5	°F	**Air Sample Collected:**	No
Control Room Temp:	38	°F	**SVE Run Time:**	–
XP Room Temp:	41	°F	**Sparge Run Time:**	–

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-17-17 **Time:** _____

Temp: 24° clear

SVE Process Vacuum:	34.6	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	6.0	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.7	SCFM		
Sparge Temp:	48.4	°F	**Air Sample Collected:**	No
Control Room Temp:	36	°F	**SVE Run Time:**	—
XP Room Temp:	39	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-15-17 **Time:** _____

Temp: 22°

SVE Process Vacuum:	48.1	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	5.7	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.7	SCFM		
Sparge Temp:	42.6	°F	**Air Sample Collected:**	NO
Control Room Temp:	34	°F	**SVE Run Time:**	—
XP Room Temp:	42.7	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-14-17 **Time:** _____

Temp: 30° Snow

SVE Process Vacuum:	39.9	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	6.8	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.7	SCFM		
Sparge Temp:	57.5	°F	**Air Sample Collected:**	NO
Control Room Temp:	41	°F	**SVE Run Time:**	—
XP Room Temp:	57.5	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-13-17 **Time:** _____

Temp: 23° clear

SVE Process Vacuum:	30.9	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	6.2	PSI		
SVE Process Flow:	1.7	SCFM	**System Status:** (Departure)	ON
Sparge Temp:	46.3	°F	**Air Sample Collected:**	No
Control Room Temp:	35	°F	**SVE Run Time:**	—
XP Room Temp:	46.2	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-10-17 **Time:** _____

Temp: 44°

SVE Process Vacuum:	38.7	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	7.7	PSI		
SVE Process Flow:	1.6	SCFM	**System Status:** (Departure)	ON
Sparge Temp:	68.2	°F	**Air Sample Collected:**	No
Control Room Temp:	46	°F	**SVE Run Time:**	—
XP Room Temp:	49°	°F	**Sparge Run Time:**	

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-9-17 **Time:** _____

Temp: 50° clear

SVE Process Vacuum:	35.4	in WC	**System Status: (Arrival)**	OFF
Sparge PSI:	8.0	PSI	**System Status: (Departure)**	OFF
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	72.6	°F	**Air Sample Collected:**	NO
Control Room Temp:	47°	°F	**SVE Run Time:**	—
XP Room Temp:	50°	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 AS/SVE System Data Log

Date: 3-8-17 **Time:** _____

Temp: 48° cloudy.

SVE Process Vacuum:	26.4	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	9.2	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	70	°F	**Air Sample Collected:**	No
Control Room Temp:	45	°F	**SVE Run Time:**	—
XP Room Temp:	58.9	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 3-6-17 **Time:** _____

Temp: 30° clear

SVE Process Vacuum:	28.2	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.7	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	42.3	°F	**Air Sample Collected:**	NO
Control Room Temp:	37°	°F	**SVE Run Time:**	✓
XP Room Temp:	43°	°F	**Sparge Run Time:**	✓

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 AS/SVE System Data Log

Date: 3-3-17 **Time:** _____

Temp: 33°

SVE Process Vacuum:	35.0	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	7.5	PSI		
SVE Process Flow:	1.7	SCFM	**System Status:** (Departure)	ON
Sparge Temp:	61.9	°F	**Air Sample Collected:**	No
Control Room Temp:	43.0	°F	**SVE Run Time:**	
XP Room Temp:	62.1	°F	**Sparge Run Time:**	

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 AS/SVE System Data Log

Date: 3-2-17 **Time:** _____

Temp: 44° Windy

SVE Process Vacuum:	39.6	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	7.9	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	68.4	°F	**Air Sample Collected:**	NO
Control Room Temp:	47	°F	**SVE Run Time:**	-
XP Room Temp:	48	°F	**Sparge Run Time:**	-

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 AS/SVE System Data Log

Date: 3-1-17 **Time:** _____

Temp: 57°

SVE Process Vacuum:	38.2	in WC	**System Status:** (Arrival)	OFF
Sparge PSI:	9.7	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	64.0	°F	**Air Sample Collected:**	NO
Control Room Temp:	48	°F	**SVE Run Time:**	NOT ON SCREEN
XP Room Temp:	52	°F	**Sparge Run Time:**	NOT on screen

Maintenance Work Performed, Adjustments Made and Comments:

Alarm history - phase loss alarm 2/28/17 1:57pm

Cell 5 GW Pump and Treat System Data Log

Date: 3-31-17 **Time:** _____

Temp: 43° Rain

Total Discharge: 11120411 Gal

Daily Discharge: 10,554 Gal

AST Pressure: 58.7 in WC

Dual Phase Vacuum: 18.2 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 63 °F

AST water PH 9.02 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 48 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 19 #

Surge Counter: 25,174

Remaining Defoamer: 9 gals.

Run Times

Inlet Pump 379 Outlet Pump 560 Booster Blower 758

AST Blower 758 MS Pump 271 Aeration Blower ~~0~~

AST Pump 212 Dual Phase 641

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-30-17 **Time:** _____

Temp: 42° cloudy.

Total Discharge:	11109833	Gal	**Mag Gauge Flow:**	1.75 (1.50-2.00)
Daily Discharge:	11,256	Gal	**System Status:** (Arrival)	ON
AST Pressure:	60.9	in WC		
Dual Phase Vacuum:	18.1	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	101	°F	**Sample Collected:**	NO
XP Room Temp:	63	°F	**Bag Filters Replaced:**	NO
AST water PH	8.39	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO
Inf Bag Filter DP:	o/o o/o	PSI	**Remianing Cartridge**	19 #
Eff Bag Filter DP:	o/o o/o	PSI	**Surge Counter:**	25,174
Remaining Bag Filters:	48	#	**Remaining Defoamer:**	6 gals.

Run Times

Inlet Pump	372	Outlet Pump	540	Booster Blower	734
AST Blower	734	MS Pump	265	Aeration Blower	~~0~~
AST Pump	207	Dual Phase	617		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-28-17 **Time:** _____

Temp: 53° cloudy.

Total Discharge: 11098577 Gal

Daily Discharge: 9640 Gal

AST Pressure: 58.9 in WC

Dual Phase Vacuum: 18.4 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 71 °F

AST water PH 8.40 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 48 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 19 #

Surge Counter: 25,174

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 366 Outlet Pump 519. Booster Blower 710

AST Blower 710 MS Pump 258 Aeration Blower ~~0~~

AST Pump 202 Dual Phase 593

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-28-17 **Time:** _____

Temp: 53° rain

Total Discharge:	11088937	Gal	**Mag Gauge Flow:**	1.75 (1.50-2.00)
Daily Discharge:	9049	Gal	**System Status:** (Arrival)	ON
AST Pressure:	59.2	in WC		
Dual Phase Vacuum:	18.3	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	102	°F	**Sample Collected:**	NO
XP Room Temp:	73	°F	**Bag Filters Replaced:**	yes
AST water PH	8.48	pH(7.0-9.0)	**Cartridge Filters Replaced:**	yes
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	19 #
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	25,174
Remaining Bag Filters:	48	#	**Remaining Defoamer:**	9 gals.

Run Times

Inlet Pump	360	Outlet Pump	503	Booster Blower	686
AST Blower	686	MS Pump	253	Aeration Blower	0
AST Pump	198	Dual Phase	569		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-27-17 **Time:** _____

Temp: 46° rain

Total Discharge: 11079888 Gal 35865 ÷3

Daily Discharge: 11,955 Gal

AST Pressure: 59.3 in WC

Dual Phase Vacuum: 18.1 in WC

Dual Phase Temp: 107 °F

XP Room Temp: 66 °F

AST water PH 8.48 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 52 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 22 #

Surge Counter: 25,174

Remaining Defoamer: full

Run Times

Inlet Pump 354 Outlet Pump 487 Booster Blower 664

AST Blower 664 MS Pump 247 Aeration Blower ~~0~~

AST Pump 194 Dual Phase 547

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-24-17 **Time:** _____

Temp: 36 cloudy

Total Discharge: 11044023 Gal

Daily Discharge: 13,586 Gal

AST Pressure: 61.7 in WC

Dual Phase Vacuum: 17.9 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 62 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 52 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: Yes

Cartridge Filters Replaced: Yes

Remianing Cartridge 22 #

Surge Counter: 25,174

Remaining Defoamer: 4 gals.

Run Times

Inlet Pump 332 Outlet Pump 433 Booster Blower 590

AST Blower 590 MS Pump 226 Aeration Blower ~~0~~

AST Pump 178 Dual Phase 473

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-23-17 **Time:** _____

Temp: 27° clear

Total Discharge:	11030437	Gal	**Mag Gauge Flow:**	1.75 (1.50-2.00)
Daily Discharge:	12,424	Gal	**System Status:** (Arrival)	ON
AST Pressure:	64.4	in WC		
Dual Phase Vacuum:	17.8	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	101	°F	**Sample Collected:**	NO
XP Room Temp:	58	°F	**Bag Filters Replaced:**	NO
AST water PH	8.30	pH(7.0-9.0)	**Cartridge Filters Replaced:**	25
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	25 #
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	25,174
Remaining Bag Filters:	56	#	**Remaining Defoamer:**	4 gals.

Run Times

Inlet Pump	324	Outlet Pump	415	Booster Blower	566
AST Blower	566	MS Pump	217	Aeration Blower	0
AST Pump	172	Dual Phase	449		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-22-17 **Time:** _____

Temp: 43° SUNNY.

Total Discharge: 11018013 Gal

Daily Discharge: 12,763 Gal

AST Pressure: 59.8 in WC

Dual Phase Vacuum: 18.3 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 66 °F

AST water PH 8.35 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 56 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 25 #

Surge Counter: 25,174

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 316 Outlet Pump 400 Booster Blower 543

AST Blower 543 MS Pump 210 Aeration Blower ~~0~~

AST Pump 166 Dual Phase 426

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-21-17 **Time:** _____

Temp: 44° cloudy.

Total Discharge:	11005250	Gal	**Mag Gauge Flow:**	1.75 (1.50-2.00)
Daily Discharge:	14,165	Gal	**System Status:** (Arrival)	ON
AST Pressure:	59.5	in WC	**System Status:** (Departure)	ON
Dual Phase Vacuum:	17.9	in WC		
Dual Phase Temp:	105	°F	**Sample Collected:**	NO
XP Room Temp:	66	°F	**Bag Filters Replaced:**	NO
AST water PH	8.40	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	25 #
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	25,174
Remaining Bag Filters:	56	#	**Remaining Defoamer:**	6 gals.

Run Times

Inlet Pump	308	Outlet Pump	385	Booster Blower	518
AST Blower	518	MS Pump	202	Aeration Blower	~~0~~
AST Pump	161	Dual Phase	401		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-20-17 **Time:** _____

Temp: 36°

Total Discharge: 10991085 Gal 55905 ÷3

Daily Discharge: 18,635 Gal

AST Pressure: 60.6 in WC

Dual Phase Vacuum: 19.4 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 63 °F

AST water PH 8.41 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 56 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 25 #

Surge Counter: 25,174

Remaining Defoamer: 7 gals

Run Times

Inlet Pump 299 Outlet Pump 370 Booster Blower 494

AST Blower 494 MS Pump 193 Aeration Blower ~~0~~

AST Pump 154 Dual Phase 378

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-17-17 **Time:** _____

Temp: 27° clear

Total Discharge:	10935180	Gal	**Mag Gauge Flow:**	1.75 (1.50-2.00)
Daily Discharge:	15,316	Gal	**System Status:** (Arrival)	ON
AST Pressure:	62.3	in WC		
Dual Phase Vacuum:	20.9	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	98	°F	**Sample Collected:**	NO
XP Room Temp:	60	°F	**Bag Filters Replaced:**	NO
AST water PH	6.90	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	0 #
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	25,174
Remaining Bag Filters:	56	#	**Remaining Defoamer:**	10 gals.

Run Times

Inlet Pump	263	Outlet Pump	307	Booster Blower	422
AST Blower	422	MS Pump	160	Aeration Blower	0
AST Pump	130	Dual Phase	324		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-16-17 **Time:** _____

Temp: 24° clear

Total Discharge: 10919864 Gal

Daily Discharge: 19,468 Gal

AST Pressure: 61.1 in WC

Dual Phase Vacuum: 18.8 in WC

Dual Phase Temp: 97 °F

XP Room Temp: 59 °F

AST water PH 9.50 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 6 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: Yes

Cartridge Filters Replaced: NO

Remianing Cartridge 6 #

Surge Counter: 25,173

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 253 Outlet Pump 290 Booster Blower 402

AST Blower 402 MS Pump 150 Aeration Blower 0

AST Pump 123 Dual Phase 311

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-15-17 **Time:** _____

Temp: 22°

Total Discharge: 10900396 Gal

Daily Discharge: 14,060 Gal

AST Pressure: 61.3 in WC

Dual Phase Vacuum: 18.8 in WC

Dual Phase Temp: 97 °F

XP Room Temp: 56 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 10 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: No

Remianing Cartridge 6 #

Surge Counter: 25,172

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 241 Outlet Pump 268 Booster Blower 376

AST Blower 376 MS Pump 139 Aeration Blower ~~0~~

AST Pump 115 Dual Phase 296

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-14-17 **Time:** _____

Temp: 30° SNOW

Total Discharge: 10886336 Gal

Daily Discharge: 20,600 Gal

AST Pressure: 61.1 in WC

Dual Phase Vacuum: 18.7 in WC

Dual Phase Temp: 99 °F

XP Room Temp: 59 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 10 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 6 #

Surge Counter: 25,172

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 232 Outlet Pump 252 Booster Blower 355

AST Blower 355 MS Pump 130 Aeration Blower 0

AST Pump 109 Dual Phase 274

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-13-17 **Time:** 1030

Temp: 23° clear

Total Discharge: 10865736 Gal 58906 ÷3

Daily Discharge: 19,635 Gal

AST Pressure: 63.5 in WC

Dual Phase Vacuum: 18.2 in WC

Dual Phase Temp: 99 °F

XP Room Temp: 56 °F

AST water PH 8.92 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 10 #

Mag Gauge Flow: 2.0 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 6 #

Surge Counter: 25,172

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 219 Outlet Pump 229 Booster Blower 327

AST Blower 327 MS Pump 118 Aeration Blower 0

AST Pump 100 Dual Phase 246

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-10-17 **Time:** _____

Temp: 44°

Total Discharge: 10806830 Gal

Daily Discharge: 21,013 Gal

AST Pressure: 59.3 in WC

Dual Phase Vacuum: 18.6 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 67 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge _____ #

Surge Counter: 25,

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 180 Outlet Pump 164 Booster Blower 255

AST Blower 255 MS Pump 82 Aeration Blower 0

AST Pump 73 Dual Phase 175

Maintenance Work Performed, Adjustments Made and Comments:

3/8 43 alarm resets
3/9 Ø ??

Cell 5 GW Pump and Treat System Data Log

Date: 3-9-17 **Time:** _____

Temp: 50° clear

Total Discharge:	10785817	Gal	**Mag Gauge Flow:**	1.70 (1.50-2.00)
Daily Discharge:	17,411	Gal	**System Status:** (Arrival)	ON
AST Pressure:	59.9	in WC		
Dual Phase Vacuum:	18.3	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	102	°F	**Sample Collected:**	NO
XP Room Temp:	69	°F	**Bag Filters Replaced:**	NO
AST water PH		pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO
Inf Bag Filter DP:	o/o o/o	PSI	**Remianing Cartridge**	17 #
Eff Bag Filter DP:	o/o o/o	PSI	**Surge Counter:**	25,
Remaining Bag Filters:		#	**Remaining Defoamer:**	6 gals

Run Times

Inlet Pump	165	Outlet Pump	141	Booster Blower	231
AST Blower	231	MS Pump	70	Aeration Blower	Ø
AST Pump	64	Dual Phase	151		

Maintenance Work Performed, Adjustments Made and Comments:

3/8/17 03:28 pm. air stripper high level alarm (last recorded alarm) (see alarm sheet.)

15 alarms

Cell 5 GW Pump and Treat System Data Log

Date: 3-8-17 **Time:** _____

Temp: 48° cloudy.

Total Discharge: 10768406 Gal

Daily Discharge: 19,076 Gal

AST Pressure: 60.0 in WC

Dual Phase Vacuum: 19.4 in WC

Dual Phase Temp: 106 °F

XP Room Temp: 71 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 32 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 17 #

Surge Counter: _____

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 156 Outlet Pump 127 Booster Blower 215

AST Blower 215 MS Pump 61 Aeration Blower Ø

AST Pump 58 Dual Phase 135

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-7-17 **Time:** _____

Temp: 45°

Total Discharge:	10749330	Gal	**Mag Gauge Flow:**	1.70 (1.50-2.00)
Daily Discharge:	16,720	Gal	**System Status:** (Arrival)	OFF
AST Pressure:	58.1	in WC		
Dual Phase Vacuum:	19.7	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	94	°F	**Sample Collected:**	NO
XP Room Temp:	70	°F	**Bag Filters Replaced:**	NO
AST water PH	8.20	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	17 #
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	
Remaining Bag Filters:	32	#	**Remaining Defoamer:**	5 gals.

Run Times

Inlet Pump	141	Outlet Pump	104	Booster Blower	184
AST Blower	184	MS Pump	48	Aeration Blower	~~0~~
AST Pump	48	Dual Phase	116		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-6-17 **Time:** _____

Temp: 30° clear

Total Discharge: 10732610 Gal 42,202 ÷3 **Mag Gauge Flow:** 1.70 (1.50-2.00)

Daily Discharge: 14,067 Gal **System Status:** ON (Arrival)

AST Pressure: 61.8 in WC

Dual Phase Vacuum: 19.2 in WC **System Status:** ON (Departure)

Dual Phase Temp: 99 °F **Sample Collected:** No

XP Room Temp: 58 °F **Bag Filters Replaced:** yes

AST water PH 8.20 pH(7.0-9.0) **Cartridge Filters Replaced:** yes

Inf Bag Filter DP: 0/0 0/0 PSI **Remianing Cartridge** _____ #

Eff Bag Filter DP: 0/0 0/0 PSI **Surge Counter:** 12,128

Remaining Bag Filters: _____ # **Remaining Defoamer:** 6 gals.

Run Times

Inlet Pump 128 Outlet Pump 88 Booster Blower 164

AST Blower 164 MS Pump 41 Aeration Blower 0

AST Pump 41 Dual Phase 104

Maintenance Work Performed, Adjustments Made and Comments:

* acid drum needs to be replaced. C 3/6/17.

Cell 5 GW Pump and Treat System Data Log

Date: 3-3-17 **Time:** _____

Temp: 33° cloudy.

Total Discharge: 10690408 Gal

Daily Discharge: 11,666 Gal

AST Pressure: 62.4 in WC

Dual Phase Vacuum: 18.0 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 62 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: — PSI

Eff Bag Filter DP: — PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: 0

Cartridge Filters Replaced: yes

Remianing Cartridge _____ #

Surge Counter: ~~12128~~

Remaining Defoamer: —

Run Times

Inlet Pump 61 Outlet Pump 53 Booster Blower 92

AST Blower 92 MS Pump 25 Aeration Blower 0

AST Pump 25 Dual Phase 69

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-2-17 **Time:** _____

Temp: 45°

Total Discharge: 10678742 Gal

Daily Discharge: 14226 Gal

AST Pressure: 61.2 in WC

Dual Phase Vacuum: 17.8 in WC

Dual Phase Temp: 104 °F

XP Room Temp: 68 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: do do PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 39. #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: NO

Cartridge Filters Replaced: No

Remianing Cartridge 20 #

Surge Counter: 12,128

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 42 Outlet Pump 45 Booster Blower 72

AST Blower 72 MS Pump 20 Aeration Blower 0

AST Pump 20 Dual Phase 55

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 3-1-17 **Time:** _____

Temp: 57°

Total Discharge:	10664516	Gal	**Mag Gauge Flow:**	1.70 (1.50-2.00)
Daily Discharge:	19,880	Gal	**System Status:** (Arrival)	ON
AST Pressure:	59.2	in WC		
Dual Phase Vacuum:	18.1	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	102	°F	**Sample Collected:**	NO
XP Room Temp:	65	°F	**Bag Filters Replaced:**	yes
AST water PH	9.0	pH(7.0-9.0)	**Cartridge Filters Replaced:**	yes
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	20 #
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	12,168
Remaining Bag Filters:	43	#	**Remaining Defoamer:**	8 gals.

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 4-28-17 **Time:** 0710

Temp: 63°

Oxidizer Main Temp: — °F **System Status:** ON (Arrival)

Oxidizer High Temp: — °F

Element High Temp: — °F **System Status:** ON (Departure)

SVE Process Vacuum: 52.1 in WC

Sparge PSI: 11.8 PSI **Air Sample Collected:** yes

SVE Process Flow: 2.9 SCFM

Surge Counter: N/A

Sparge Temp: 86 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	4	5	13	4	10	19	3	9
2	5	11	8	4	13	14	4	10	20	4	8
3	4	12	9	4	6	15	4	3	21	4	11
4	5	5	10	3	9	16	4	7	22	OFF	
5	5	2	11	3	9	17	4	10	23	4	10
6	4	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 144°

rdg. at TI 101 port 43.1 ppm

rdg. at carbon outlet port TI 301 29.2 ppm

total SCFM 198

SVE run time 541

Sparge run time 541

XP room temp. 68

Sparge room temp. 76

Cell 1 AS/SVE System Data Log

Date: 4-27-17 **Time:** _____

Temp: 58°

Oxidizer Main Temp: – °F **System Status:** ON (Arrival)

Oxidizer High Temp: – °F

Element High Temp: – °F **System Status:** ON (Departure)

SVE Process Vacuum: 54.7 in WC

Sparge PSI: 12.8 PSI **Air Sample Collected:** Yes

SVE Run time 516

SVE Process Flow: 2.9 SCFM Sparge Run time 516 **Surge Counter:** N/A.

Sparge Temp: 72 °F

	PSI	SFE		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	5	13	4	10	19	3	9
2	5	11	8	4	13	14	4	10	20	4	8
3	4	13	9	4	6	15	4	3	21	4	12
4	5	4	10	5	9	16	5	7	22	OFF	
5	5	2	11	3	9	17	4	10	23	4	11
6	5	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 142°

rdg. at TI 101 port 40 ppm

rdg. at carbon outlet port TI 301 10.4 ppm.

total SCFM 190

SVE run time 518

Sparge run time 518

XP room temp. 69°

Sparge room temp. 66°

Cell 1 AS/SVE System Data Log

Date: 4-26-17 **Time:** _____

Temp: 55°

Oxidizer Main Temp: – °F **System Status:** ON (Arrival)

Oxidizer High Temp: – °F

Element High Temp: – °F **System Status:** ON (Departure)

SVE Process Vacuum: 54.8 in WC

Sparge PSI: 11.8 PSI **Air Sample Collected:** yes

SVE Process Flow: 2.9 SCFM

Surge Counter: N/A.

Sparge Temp: 72 °F

		SCFM			SCFM			SCFM			SCFM
1	OFF		7	5	5	13	4	10	19	3	9
2	5	11	8	4	13	14	4	10	20	4	8
3	4	13	9	4	6	15	4	3	21	4	12
4	5	4	10	5	9	16	5	7	22	OFF	
5	5	2	11	3	9	17	4	10	23	4	11
6	5	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 136°

rdg. at TI 101 port 96.3 ppm.

rdg. at carbon outlet port TI 301 124.6 ppm

total SCFM 190

SVE run time 495

Sparge run time 495

XP room temp. 64

Sparge room temp. 60

Cell 1 AS/SVE System Data Log

Date: 4-25-17 **Time:** _____

Temp: 52°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 56.4 in WC

Sparge PSI: 12.9 PSI

SVE Process Flow: 2.9 SCFM

Sparge Temp: 70 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: yes

Surge Counter: N/A.

1	OFF		7	5	5	13	4	10	19	3	9
2	5	11	8	4	13	14	4	10	20	4	8
3	4	13	9	4	6	15	4	3	21	4	12
4	5	4	10	5	9	16	5	7	22	OFF	
5	5	2	11	3	9	17	4	10	23	4	11
6	5	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe — 132°

rdg. at TI 101 port —

rdg. at carbon outlet port TI 301 —

total SCFM 190°

SVE Run time — 469

Sparge run time — 469

Sparge room temp. — 62°

Xp room temp. — 58°

Cell 1 AS/SVE System Data Log

Date: 4-24-17 **Time:** _____

Temp: 52°

Oxidizer Main Temp: ✓ °F

Oxidizer High Temp: ✓ °F

Element High Temp: ✓ °F

SVE Process Vacuum: 56.6 in WC

Sparge PSI: 12.6 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 68 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: Yes

Surge Counter: N/A

1	OFF		7	4	5	13	4	11	19	3	9
2	5	9	8	4	13	14	4	10	20	4	8
3	4	13	9	4	6	15	4	4	21	4	11
4	5	5	10	4	9	16	4	10	22	OFF	
5	5	2	11	3	9	17	4	10	23	4	11
6	4	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temperature at TI 101 pipe — 132°

rdg. at TI 101 port — 157.9 ppm

rdg. at outlet port TI 301 — 176.2 ppm

total SCFM — 193

SVE run time — 444

Sparge run time — 444

Cell 1 AS/SVE System Data Log

Date: 4-21-17 **Time:** _____

Temp: 61°

Oxidizer Main Temp: – °F **System Status:** ON (Arrival)

Oxidizer High Temp: – °F

Element High Temp: – °F **System Status:** ON (Departure)

SVE Process Vacuum: 53.4 in WC

Sparge PSI: 12.8 PSI **Air Sample Collected:** yes *

SVE Process Flow: 2.8 SCFM

Surge Counter: NA.

Sparge Temp: 75 °F

1	OFF		7	4	5	13	4	11	19	3	9
2	5	9	8	4	13	14	4	10	20	4	8
3	4	13	9	4	6	15	4	3	21	4	11
4	5	5	10	5	9	16	4	10	22	OFF	
5	5	2	11	3	9	17	3	9	23	4	10
6	4	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

sparge room temp. 68°
xp room temp. 64°

SVE run time 374.
Sparge run time 374.

* TI 101 pipe – 136°
rdg. at 101 – 164.3 ppm –

* Outlet port PI 301 rdg. – 144.6 ppm.

total SCFM 190

Cell 1 AS/SVE System Data Log

Date: 4-20-17 **Time:** _____

Temp: 57°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 54.3 in WC

Sparge PSI: 73.1 PSI

SVE Process Flow: 2.9 SCFM

Sparge Temp: 76 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Surge Counter: gauge broken

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	4	5	13	4	10	19	3	9
2	5	9.5	8	4	12.5	14	4	10	20	4	8
3	4	13	9	4	6	15	4	2	21	4	11
4	5	5	10	4	8.5	16	4	10	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	10
6	4	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at discharge pipe to carbon tank. 150°

total SCFM 188.5

sparge room temp. 69°

Xp room temp. 62°

PI 101 - 140 ppm.

PI 301 at outlet of carbon tank 156.4 ppm.

Cell 1 AS/SVE System Data Log

Date: 4-19-17 **Time:** _____

Temp: 51°

Oxidizer Main Temp: - °F

Oxidizer High Temp: - °F

Element High Temp: - °F

SVE Process Vacuum: 57.9 in WC

Sparge PSI: 12.3 PSI

SVE Process Flow: 3.0 SCFM

Sparge Temp: 67 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Surge Counter: gauge broken

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	5	13	4	10	19	3	9
2	5	9.5	8	4	12.5	14	4	10	20	4	8
3	4	13	9	4	6	15	4	2	21	4	11
4	5	5	10	5	9	16	4	9.5	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	11
6	4	10	12	3	10	18	4	9	24	4	9.5
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at discharge pipe to carbon tank 140°

total SCFM 190

Sparge room temp. 64°

XP room temp. 59°

Cell 1 AS/SVE System Data Log

Date: 4-18-17 **Time:** 0831

Temp: 53°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 56.5 in WC

Sparge PSI: 13.0 PSI

SVE Process Flow: 3.3 SCFM

Sparge Temp: 68 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Surge Counter: gauge broke

	psi	scfm		psi	scfm		psi	scfm		psi	scfm
1	OFF		7	4	5	13	4	10	19	3	9
2	5	9	8	4	12	14	4	10	20	4	9
3	4	13	9	4	6	15	4	3	21	4	11
4	5	5	10	5	9	16	4	9	22	OFF	
5	5	2	11	2.5	9.	17	3	10	23	4	11
6	4	10	12	2.5	10	18	4	9	24	4	10
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. of discharge pipe to carbon tank. 142°

sparge room temp. 68°

xp room temp. 63°

SVE run 302 hrs.

sparge run 302 hrs.

total SCFM 191.

Cell 1 AS/SVE System Data Log

Date: 4-17-17 **Time:** _____

Temp: 68°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 51.4 in WC

Sparge PSI: 12.3 PSI

SVE Process Flow: 3.0 SCFM

Sparge Temp: 87. °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: *

Surge Counter: BROKE

1	OFF		7	4	5	13	4	10	19	3	9
2	5	11	8	4	12	14	4	10	20	4	8
3	4	13	9	4	6	15	4	4	21	4	11
4	5	6	10	5	9	16	4	8	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	10
6	4	10	12	3	10	18	4	8	24	4	10
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

SVE run time 277 hours total SCFM 190

Sparge run time 277 hours.

* discharge pipe 144°

rdg. at discharge pipe ppm * our meter bad.

rdg. at outlet of carbon tank * _____

Sparge room temp. 80°

Xp room temp. 72°

Cell 1 AS/SVE System Data Log

Date: 4-14-17 **Time:** _____

Temp: 51°

Oxidizer Main Temp: – °F **System Status:** ON (Arrival)

Oxidizer High Temp: – °F

Element High Temp: – °F **System Status:** ON (Departure)

SVE Process Vacuum: 56.2 in WC

Sparge PSI: 12.1 PSI **Air Sample Collected:** yes PID. 388.3

SVE Process Flow: 3.0 SCFM

Surge Counter: broke

Sparge Temp: 70 °F

1	Ø		7	5	5	13	4	10	19	3	9
2	5	11	8	4	12	14	4	10	20	4	9
3	4	13	9	4	6	15	4	3	21	4	11
4	5	7	10	5	9	16	5	8	22	Ø	
5	5	2	11	3	9	17	3	9	23	4	10
6	4	10	12	3	10	18	4	8	24	4	10
									25	Ø	

Maintenance Work Performed, Adjustments Made and Comments:

discharge temperature on pipe to carbon tank 130°

Cell 1 AS/SVE System Data Log

Date: 4-13-17 **Time:** 0735

Temp: 55°

Oxidizer Main Temp: – °F **System Status:** ON (Arrival)

Oxidizer High Temp: – °F

Element High Temp: – °F **System Status:** ON (Departure)

SVE Process Vacuum: 56.3 in WC

Sparge PSI: 13.0 PSI **Air Sample Collected:** yes 393.3

SVE Process Flow: 3.1 SCFM

Surge Counter: Broken gauge

Sparge Temp: 70 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	Ø		7	5	5	13	4	10	19	3	9
2	5	11	8	4	12	14	4	10	20	4	9
3	4	13	9	4	6	15	4	3	21	4	11
4	5	7	10	5	9	16	5	8	22	Ø	
5	5	2	11	3	9	17	3	9	23	4	10
6	4	10	12	3	10	18	4	8	24	4	10
									25	Ø	

Maintenance Work Performed, Adjustments Made and Comments:

SVE discharge temperature 132° at 7:32AM 55° outside temp.

SVE run time 181

sparge run time 181

PID 393.3

gauge rdg. 8psi

PI 301

SVE set at 50.8

Sparge " " 40.0

(aftercooler " " 14.0 running at 72°)

Sparge room temp. 63°

Xp room temp 59°

Cell 1 AS/SVE System Data Log

Date: 4-12-17 **Time:** 0820

Temp: 59° cloudy.

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 53.7 in WC

Sparge PSI: 12.8 PSI

SVE Process Flow: 2.9 SCFM

Sparge Temp: 81° °F

System Status: on (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Surge Counter: Broken gauge

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	~~0~~		7	5	5	13	4	10	19	2.5	9
2	5	5	8	4	12	14	4	10	20	4	9
3	4	13	9	4	6	15	4	3	21	4	11
4	5	7	10	5	9	16	5	8	22	~~0~~	
5	5	2	11	2.5	9	17	3	9	23	4	10
6	4	10	12	2.5	10	18	4	8	24	4	10
									25	~~0~~	

Maintenance Work Performed, Adjustments Made and Comments:

temp. on tube to carbon tank 140° - 0820 hrs. TI 101 gauge

gauge for cell 3 missing the rubber vent cap on top - still operational.

Sparge mtr. set to 40.0 Hz

SVE set on 50.0 Hz

Sparge room temp. 72

XP room temp. 64

Cell 1 AS/SVE System Data Log

Date: 4-11-17 **Time:** _____

Temp: 54° Sunny.

Oxidizer Main Temp: ✓ °F

Oxidizer High Temp: ✓ °F

Element High Temp: ✓ °F

SVE Process Vacuum: 58.9 in WC

Sparge PSI: 9.3 PSI

SVE Process Flow: 3.4 SCFM

Sparge Temp: 65 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Surge Counter: Broken

	PSI	SCFM										
1	4	1	7	4	3	13	2.5	6	19	2.5	7
2	4	5	8	4	8	14	3	6	20	2.4	4
3	3	9	9	3	4	15	2.5	Ø	21	3	4
4	4	3	10	4	4	16	3	3	22	3	4
5	4	1	11	2	8	17	3	10	23	3	2
6	4	7	12	3	11	18	3	2	24	3	7
									25	Ø	

Maintenance Work Performed, Adjustments Made and Comments:

SVE run time 133

sparge " " 133

(hose temp from pump to carbon tank) 150° - 0945 hrs.

put hose back on pump to carbon tank.) 160° - 0100 hrs. ✓

Sparge temp 72

xp temp 71

9:30

Outside temp. 69° /

1 pm

73°

Cell 1 AS/SVE System Data Log

Date: 4-10-17 **Time:** 0930

Temp: 46° Sunny.

Oxidizer Main Temp: – °F **System Status:** ON (Arrival)

Oxidizer High Temp: – °F

Element High Temp: – °F **System Status:** ON (Departure)

SVE Process Vacuum: 58.1 in WC

Sparge PSI: 9.5 PSI **Air Sample Collected:** No

SVE Process Flow: 3.5 SCFM

Surge Counter: broken gauge

Sparge Temp: 60 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	4	1	7	3	3	13	3	6	19	2.5	7
2	4	5	8	3	8	14	3	6	20	2.5	4
3	3	9	9	3	4	15	1.5	Ø	21	3	4
4	4	2	10	3	4	16	3	Ø	22	3	3
5	4	Ø	11	2.5	9	17	3	11	23	2.5	2
6	4	7	12	2.5	11	18	3	4	24	3	7
									25	3	Ø

Maintenance Work Performed, Adjustments Made and Comments:

sparge room temp 68°
xp room temp 68°

SVE Run time 109.
sparge " " 109.

temp. on discharge tube from trailer to carbon tank 140° at 9:30 AM.

Cell 1 AS/SVE System Data Log

Date: 4-7-17 **Time:** _____

Temp: 46° cloudy.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 56.2 in WC

Sparge PSI: 9.2 PSI

SVE Process Flow: 3.1 SCFM

Sparge Temp: 59 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Surge Counter: ~~broken~~ gauge

1	7	13	19
2	8	14	20
3	9	15	21
4	10	16	22
5	11	17	23
6	12	18	24
			25

Maintenance Work Performed, Adjustments Made and Comments:

SVE run time 44 hrs.
sparge run time 44 hrs.

Cell 1 AS/SVE System Data Log

Date: 4-6-17 **Time:** _____

Temp: 51° rain

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 50.7 in WC

Sparge PSI: 8.3 PSI

SVE Process Flow: 2.9 SCFM

Sparge Temp: 61 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

SVE run time 20 hrs.

sparge run time 20 hrs.

Surge Counter: _____

1	7	13	19
2	8	14	20
3	9	15	21
4	10	16	22
5	11	17	23
6	12	18	24
			25

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 4-5-17 **Time:** _____

Temp: 58°

Oxidizer Main Temp: _____ °F **System Status:** OFF (Arrival)

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F **System Status:** OFF (Departure)

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI **Air Sample Collected:** _____

SVE Process Flow: _____ SCFM

Surge Counter: _____

Sparge Temp: _____ °F

1 _____	7 _____	13 _____	19 _____
2 _____	8 _____	14 _____	20 _____
3 _____	9 _____	15 _____	21 _____
4 _____	10 _____	16 _____	22 _____
5 _____	11 _____	17 _____	23 _____
6 _____	12 _____	18 _____	24 _____
			25 _____

Maintenance Work Performed, Adjustments Made and Comments:

on going hooking up trailer for service C

Cell 1 AS/SVE System Data Log

Date: 4-4-17 **Time:** _____

Temp: 58° cloudy.

Oxidizer Main Temp: _____ °F **System Status:** OFF (Arrival)

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F **System Status:** OFF (Departure)

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI **Air Sample Collected:** _____

SVE Process Flow: _____ SCFM

Surge Counter: _____

Sparge Temp: _____ °F

1 _____	7 _____	13 _____	19 _____
2 _____	8 _____	14 _____	20 _____
3 _____	9 _____	15 _____	21 _____
4 _____	10 _____	16 _____	22 _____
5 _____	11 _____	17 _____	23 _____
6 _____	12 _____	18 _____	24 _____
			25 _____

Maintenance Work Performed, Adjustments Made and Comments:

trailer needs to be hooked up electrically.

Cell 1 AS/SVE System Data Log

Date: 4-3-17 **Time:** _____

Temp: 44°

Oxidizer Main Temp: _____ °F

System Status: OFF (Arrival)

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

System Status: OFF (Departure)

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

Air Sample Collected: _____

SVE Process Flow: _____ SCFM

Surge Counter: _____

Sparge Temp: _____ °F

1	7	13	19
2	8	14	20
3	9	15	21
4	10	16	22
5	11	17	23
6	12	18	24
			25

Maintenance Work Performed, Adjustments Made and Comments:

trailer is back - in the process of hooking up.

Cell 2 AS/SVE System Data Log

Date: 4-28-17 **Time:** _____

Temp: 63°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 0 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0 SCFM

Sparge Temp: 73 °F

System Status: (Arrival) SVE on only

System Status: (Departure) SVE on only

Air Sample Collected: No

Sparge Run Time: —

SVE " " 504

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

W/ parts — sparge compressor

Cell 2 AS/SVE System Data Log

Date: 4-27-17 **Time:** _____

Temp: 58°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 21.1 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 64 °F

System Status: (Arrival) ON SVE only

System Status: (Departure) ON SVE only

Air Sample Collected: NO

Sparge Run Time: Ø

SVE Run Time Surge Counter: 504

Maintenance Work Performed, Adjustments Made and Comments:

u/p sparge compressor

Cell 2 AS/SVE System Data Log

Date: 4-26-17 **Time:** _____

Temp: 55°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 26.4 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 65 °F

System Status: SVE on only
(Arrival)

System Status: SVE on only
(Departure)

Air Sample Collected: No

Sparge Run Time: Ø

SVE RUNTime 481
Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 4-25-17 **Time:** _____

Temp: 52°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 22.6 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 59 °F

System Status: (Arrival) SVE only

System Status: (Departure) SVE only

Air Sample Collected: No

Sparge Run Time: Ø

SVE " " 457

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 4-24-17 **Time:** _____

Temp: 52°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 22.5 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.5 SCFM

Sparge Temp: 60° °F

System Status: SVE only
(Arrival)

System Status: SVE only
(Departure)

Air Sample Collected: No

Sparge Run Time: 0

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

w/ parts — Sparge compressor

Cell 2 AS/SVE System Data Log

Date: 4-21-17 **Time:** _____

Temp: 61°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 20.3 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 68 °F

System Status: (Arrival) OFF SVE only

System Status: (Departure) OFF SVE only

Air Sample Collected: NO

Sparge Run Time: 0

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

w/p sparge compressor.

Cell 2 AS/SVE System Data Log

Date: 4-20-17 **Time:** _____

Temp: 57°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 21.4 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 65 °F

System Status: SVE only
(Arrival)

System Status: SVE only
(Departure)

Air Sample Collected: No

Sparge Run Time: 0

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

needs sparge compressor

Cell 2 AS/SVE System Data Log

Date: 4-19-17 **Time:** _____

Temp: 51°

Oxidizer Main Temp: - °F

Oxidizer High Temp: - °F

Element High Temp: - °F

SVE Process Vacuum: 21.7 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 56 °F

System Status: SVE only
(Arrival)

System Status: SVE only
(Departure)

Air Sample Collected: No

Sparge Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

needs a sparge compressor

Cell 2 AS/SVE System Data Log

Date: 4-18-17 **Time:** _____

Temp: 53°

Oxidizer Main Temp: - °F

Oxidizer High Temp: - °F

Element High Temp: - °F

SVE Process Vacuum: 21.7 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 57. °F

System Status: (Arrival) SVE only

System Status: (Departure) SVE only

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

w/parts sparge compressor

Cell 2 AS/SVE System Data Log

Date: 4-17-17 **Time:** _____

Temp: 68°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 21.7 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 57 °F

System Status: (Arrival) SVE only

System Status: (Departure) SVE only

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

waiting for a sparge compressor

Cell 2 AS/SVE System Data Log

Date: 4-14-17 **Time:** _____

Temp: 51°

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 21.7 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 56 °F

System Status: (Arrival) SVE only

System Status: (Departure) SVE only

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

needs a sparge compressor.

Cell 2 AS/SVE System Data Log

Date: 4-13-17 **Time:** _____

Temp: 55°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 26.3 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 58 °F

System Status: (Arrival) SVE only

System Status: (Departure) SVE only

Air Sample Collected: NO

Sparge Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

needs a sparge compressor – on order

compressor and motor have been removed from the trailer. 4/12/17.

SVE run time 168 hrs.

Sparge " " Ø

Cell 2 AS/SVE System Data Log

Date: 4-12-17 **Time:** _____

Temp: 59° Sunny

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 21.1 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 56 °F

System Status: (Arrival) ON SVE only

System Status: (Departure) ON SVE only

Air Sample Collected: NO

Sparge Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

needs a sparge pump.

Cell 2 AS/SVE System Data Log

Date: 4-11-17 **Time:** _____

Temp: 54° Sunny.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 21.3 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 59 °F

System Status: (Arrival) ON SVE only

System Status: (Departure) on SVE only

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

needs a sparge pump.

Cell 2 AS/SVE System Data Log

Date: 4-10-17 **Time:** _____

Temp: 46° SUNNY.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 23.5 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 0 °F

System Status: (Arrival) ON SVE ONLY

System Status: (Departure) ON SVE only

Air Sample Collected: No

Sparge Run Time: 0

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

SVE run time 97

Needs sparge motor

Cell 2 AS/SVE System Data Log

Date: 4-7-17 **Time:** _____

Temp: 46° cloudy.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 24.7 in WC

Sparge PSI: – PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 52 °F

System Status: (Arrival) ON SVE only

System Status: (Departure) ON SVE only

Air Sample Collected: NO

Sparge Run Time: ~~0~~

Surge Counter: _____

SVE run time 31

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 4-7-17 **Time:** _____

Temp: 58° rain

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: _____
(Arrival)

System Status: _____
(Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

not on our computer screen yet. to get info.

Cell 2 AS/SVE System Data Log

Date: 4-6-17 **Time:** _____

Temp: 58° rain

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: _____ (Arrival)

System Status: _____ (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

system still being updated by NES

Cell 2 AS/SVE System Data Log

Date: 4-5-17 **Time:** _____

Temp: 58°

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Air Sample Collected: _____

Sparge Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

System being updated and changed to NES system.

Cell 2 AS/SVE System Data Log

Date: 4-4-17 **Time:** _____

Temp: 58°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 92 SCFM

Sparge Temp: 51 °F

System Status: ON SVE only
(Arrival)

System Status: OFF –
(Departure)

Air Sample Collected: NO

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

System update in progress –

Cell 2 AS/SVE System Data Log

Date: 4-3-17 **Time:** _____

Temp: 44°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 31 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 92 SCFM

Sparge Temp: 51 °F

System Status: ON SVE only
(Arrival)

System Status: ON SVE only
(Departure)

Air Sample Collected: No

Sparge Run Time: –

Surge Counter: –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 4-28-17 **Time:** _____

Temp: 63°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: _____ (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

installing new transformer today

Cell 2 GW Pump and Treat System Data Log

Date: 4-27-17 **Time:** _____

Temp: 58°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

w/parts transformer & fuses

Cell 2 GW Pump and Treat System Data Log

Date: 4-26-17 **Time:** _____

Temp: 55°

Total Discharge: – gal

Daily Discharge – gal

AST Pressure: – in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

w/ parts – transformer & fuses
– filter for stripper

Cell 2 GW Pump and Treat System Data Log

Date: 4-25-17 **Time:** _____

Temp: 52°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

w/parts — transformer & fuses

— filter for stripper

Cell 2 GW Pump and Treat System Data Log

Date: 4-24-17 **Time:** _____

Temp: 52°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

w/ parts transformer & fuses
filter for stripper

Cell 2 GW Pump and Treat System Data Log

Date: 4-21-17 **Time:** _____

Temp: 61°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

w/parts transformer & fuses

Cell 2 GW Pump and Treat System Data Log

Date: 4-20-17 **Time:** _____

Temp: 57°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

waiting for transformer & fuses.

Cell 2 GW Pump and Treat System Data Log

Date: 4-19-17 **Time:** _____

Temp: 51°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

waiting for transformer & fuses

Cell 2 GW Pump and Treat System Data Log

Date: 4-18-17 **Time:** _____

Temp: 53°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

waiting for transformer & fuses

Cell 2 GW Pump and Treat System Data Log

Date: 4-17-17 **Time:** _____

Temp: 68°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

waiting for a transformer & fuses

Cell 2 GW Pump and Treat System Data Log

Date: 4-14-17 **Time:** _____

Temp: 51° Sunny.

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

waiting for a transformer & fuses

Cell 2 GW Pump and Treat System Data Log

Date: 4-13-17 **Time:** _____

Temp: 55°

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

needs a transformer
stripper needs to be re-assembled w/ modifications

Cell 2 GW Pump and Treat System Data Log

Date: 4-12-17 **Time:** _____

Temp: 59

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

need a transformer
needs stripper re-assembled.

Cell 2 GW Pump and Treat System Data Log

Date: 4-11-17 **Time:** _____

Temp: 54° SUNNY

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

needs a transformer

stripper needs to be re-assembled.

Cell 2 GW Pump and Treat System Data Log

Date: 4-10-17 **Time:** _____

Temp: 46 SUNNY

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

Needs a transformer

Stripper needs to be re-assembled.

Cell 2 GW Pump and Treat System Data Log

Date: 4-7-17 **Time:** _____

Temp: 46° cloudy.

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

needs a new transformer —

stripper needs to be re assembled. —

Cell 2 GW Pump and Treat System Data Log

Date: 4-6-17 **Time:** _____

Temp: 58° Rain

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

Stripper repairs on going

Cell 2 GW Pump and Treat System Data Log

Date: 4-5-17 **Time:** _____

Temp: 58° clear

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

System being updated by NES
Stripper modification in works

Cell 2 GW Pump and Treat System Data Log

Date: 4-4-17 **Time:** _____

Temp: 58° cloudy.

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

System being updated by NES -

Cell 2 GW Pump and Treat System Data Log

Date: 4-3-17 **Time:** _____

Temp: 44° cloudy.

Total Discharge: _____ gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Room Temp: _____ °F

Inf water PH _____ PH

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF
(Arrival)

System Status: OFF.
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge Filters: _____

Surge Counter: _____

Defoamer level: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

System being re-wired over to new NES system

Cell 3 AS/SVE System Data Log

Date: 4-28-17 **Time:** _____

Temp: 63°

SVE Process Vacuum:	40.2	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	9.0	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.1	SCFM		
Sparge Temp:	78.6	°F	**Air Sample Collected:**	No
Control Room Temp:	52	°F	**SVE Run Time:**	534
XP Room Temp:	56	°F	**Sparge Run Time:**	534

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-27-17 **Time:** _____

Temp: 58°

SVE Process Vacuum: 42.7 in WC

Sparge PSI: 8.4 PSI

SVE Process Flow: 1.4 SCFM

Sparge Temp: 70.8 °F

Control Room Temp: 47 °F

XP Room Temp: 51 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 509

Sparge Run Time: 509

After cooler time 509.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-26-17 **Time:** _____

Temp: 55°

SVE Process Vacuum: 45.0 in WC

Sparge PSI: 8.5 PSI

SVE Process Flow: 1.5 SCFM

Sparge Temp: 71.0 °F

Control Room Temp: 47. °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 485

Sparge Run Time: 485

After Cooler time 485.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-25-17 **Time:** _____

Temp: 52°

SVE Process Vacuum:	42.0	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.3	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	67.7	°F	**Air Sample Collected:**	No
Control Room Temp:	46	°F	**SVE Run Time:**	462
XP Room Temp:	67.8	°F	**Sparge Run Time:**	462
			After cooler	462

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-24-17 **Time:** _____

Temp: 52°

SVE Process Vacuum: 39.7 in WC

Sparge PSI: 8.2 PSI

SVE Process Flow: 1.5 SCFM

Sparge Temp: 66.2 °F

Control Room Temp: 45 °F

XP Room Temp: 52 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 438

Sparge Run Time: 438

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-21-17 **Time:** _____

Temp: 61°

SVE Process Vacuum:	40.1	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.9	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	74.5	°F	**Air Sample Collected:**	No
Control Room Temp:	49	°F	**SVE Run Time:**	366
XP Room Temp:	55	°F	**Sparge Run Time:**	366

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-20-17 **Time:** _____

Temp: 57°

SVE Process Vacuum: 38.2 in WC

Sparge PSI: 8.6 PSI

SVE Process Flow: 1.6 SCFM

Sparge Temp: 72.1 °F

Control Room Temp: 48° °F

XP Room Temp: 54° °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 342

Sparge Run Time: 342

after cooler 342

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-19-17 **Time:** _____

Temp: 51°

SVE Process Vacuum: 35.0 in WC

Sparge PSI: 8.3 PSI

SVE Process Flow: 1.6 SCFM

Sparge Temp: 65.4 °F

Control Room Temp: 45 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 319

Sparge Run Time: 319

After cooler 319

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-18-17 **Time:** _____

Temp: 53°

SVE Process Vacuum: 36.5 in WC

Sparge PSI: 8.2 PSI

SVE Process Flow: 1.6 SCFM

Sparge Temp: 66.5 °F

Control Room Temp: 46 °F

XP Room Temp: 66.4 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 294

Sparge Run Time: 294

after cooler 294

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-17-17 **Time:** _____

Temp: 68°

SVE Process Vacuum: 39.3 in WC

Sparge PSI: 9.0 PSI

SVE Process Flow: 1.5 SCFM

Sparge Temp: 81.4 °F

Control Room Temp: 53.0 °F

XP Room Temp: 58.0 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 271

Sparge Run Time: 271

After cooler 271

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-14-17 **Time:** 0800

Temp: 51°

SVE Process Vacuum: 35.6 in WC

Sparge PSI: 8.2 PSI

SVE Process Flow: 1.6 SCFM

Sparge Temp: 66.4 °F

Control Room Temp: 45 °F

XP Room Temp: 53 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 199

Sparge Run Time: 199

after cooler 199

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-13-17 **Time:** _____

Temp: 55°

SVE Process Vacuum: 38.2 in WC

Sparge PSI: 8.2 PSI

SVE Process Flow: 1.6 SCFM

Sparge Temp: 67.5 °F

Control Room Temp: 46 °F

XP Room Temp: 52 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 174

Sparge Run Time: 174

after coder 174

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-12-17 **Time:** _____

Temp: 59° cloudy.

SVE Process Vacuum:	39.9	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.6	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	73.4	°F	**Air Sample Collected:**	NO
Control Room Temp:	49	°F	**SVE Run Time:**	151
XP Room Temp:	55	°F	**Sparge Run Time:**	151
			After cooler	151

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-11-17 **Time:** _____

Temp: 54°

SVE Process Vacuum:	40.6	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.4	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	68.8	°F	**Air Sample Collected:**	No
Control Room Temp:	47	°F	**SVE Run Time:**	126
XP Room Temp:	52	°F	**Sparge Run Time:**	126
			After cooler	126

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-10-17 **Time:** _____

Temp: 46°

SVE Process Vacuum: 39.3 in WC

Sparge PSI: 8.1 PSI

SVE Process Flow: 1.6 SCFM

Sparge Temp: 63.6 °F

Control Room Temp: 44 °F

XP Room Temp: 51 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 103

Sparge Run Time: 103

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-7-17 **Time:** _____

Temp: 48°

SVE Process Vacuum: 48.1 in WC

Sparge PSI: 8.7 PSI

SVE Process Flow: 1.6 SCFM

Sparge Temp: 70.8 °F

Control Room Temp: 46 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 37

Sparge Run Time: 37

after cooler 37

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-6-17 **Time:** _____

Temp: 58° rain

SVE Process Vacuum:	47.0	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.9	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	67	°F	**Air Sample Collected:**	NO
Control Room Temp:	47	°F	**SVE Run Time:**	7
XP Room Temp:	51	°F	**Sparge Run Time:**	7
			after cooler:	7

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-5-17 **Time:** _____

Temp: 58° clear

SVE Process Vacuum:	42.3	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.6	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	72.7	°F	**Air Sample Collected:**	NO
Control Room Temp:	50	°F	**SVE Run Time:**	—
XP Room Temp:	53	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-4-17 **Time:** _____

Temp: 58°

SVE Process Vacuum:	45.2	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.8	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	74.9	°F	**Air Sample Collected:**	NO
Control Room Temp:	50	°F	**SVE Run Time:**	—
XP Room Temp:	55	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 4-3-17 **Time:** _____

Temp: 44° Sunny

SVE Process Vacuum:	37.7	in WC	**System Status:** (Arrival)	OFF
Sparge PSI:	9.7	PSI		
SVE Process Flow:	1.5	SCFM	**System Status:** (Departure)	ON
Sparge Temp:	82.8	°F	**Air Sample Collected:**	NO
Control Room Temp:	53.0	°F	**SVE Run Time:**	—
XP Room Temp:	82.9	°F	**Sparge Run Time:**	—

Maintenance Work Performed, Adjustments Made and Comments:

- No electric on arrival.
- Call electrical construction — breaker thrown at the substation
- Left unit running — No issues

Cell 5 GW Pump and Treat System Data Log

Date: 4-28-17 **Time:** _____

Temp: 63°

Total Discharge: 11460543 Gal

Daily Discharge: — Gal

AST Pressure: Ø in WC

Dual Phase Vacuum: Ø in WC

Dual Phase Temp: 50 °F

XP Room Temp: 69 °F

AST water PH — pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 16 #

Mag Gauge Flow: — (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: NO

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 25 #

Surge Counter: 25,176

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 659 Outlet Pump 786 Booster Blower 1260

AST Blower 1259 MS Pump 482 Aeration Blower —

AST Pump 347 Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

W/parts blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 4-26-17 **Time:** _____

Temp: 55°

Total Discharge: 11460543 Gal

Daily Discharge: — Gal

AST Pressure: Ø in WC

Dual Phase Vacuum: Ø in WC

Dual Phase Temp: 46 °F

XP Room Temp: 61 °F

AST water PH — pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: 16 #

Mag Gauge Flow: ✓ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 25 #

Surge Counter: 25,176

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 659

Outlet Pump 786

Booster Blower 1260

AST Blower 1259

MS Pump 482

Aeration Blower Ø

AST Pump 347

Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

w/ parts blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 4-25-17 **Time:** _____

Temp: 52

Total Discharge: 11460543 Gal

Daily Discharge: — Gal

AST Pressure: 0 in WC

Dual Phase Vacuum: 0 in WC

Dual Phase Temp: 45 °F

XP Room Temp: 58 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 16 #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 25 #

Surge Counter: 25,176

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 659 Outlet Pump 786 Booster Blower 1260

AST Blower 1259 MS Pump 482 Aeration Blower 0

AST Pump 347 Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

w/parts - blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 4-24-17 **Time:** _____

Temp: 52

Total Discharge: 11460543 Gal

Daily Discharge: 2356 Gal

AST Pressure: Ø in WC

Dual Phase Vacuum: Ø in WC

Dual Phase Temp: 45 °F

XP Room Temp: 59 °F

AST water PH NA pH(7.0-9.0)

Inf Bag Filter DP: do do PSI

Eff Bag Filter DP: do do PSI

Remaining Bag Filters: 16 #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge Ø #

Surge Counter: 25,176

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 659 Outlet Pump 786 Booster Blower 1260

AST Blower 1259 MS Pump 482 Aeration Blower Ø

AST Pump 347 Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

W/ parts – blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 4-21-17 **Time:** _____

Temp: 61°

Total Discharge:	11458187.	Gal	**Mag Gauge Flow:**	1.95 (1.50-2.00)
Daily Discharge:	24,552	Gal	**System Status:** (Arrival)	ON
AST Pressure:	57.5	in WC		
Dual Phase Vacuum:	19.7	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	101	°F	**Sample Collected:**	No
XP Room Temp:	77	°F	**Bag Filters Replaced:**	yes
AST water PH	9.66	pH(7.0-9.0)	**Cartridge Filters Replaced:**	yes
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	0 #
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	25,176
Remaining Bag Filters:	20	#	**Remaining Defoamer:**	10 gals.

Run Times

Inlet Pump	657	Outlet Pump	785	Booster Blower	1258
AST Blower	1257	MS Pump	480	Aeration Blower	0
AST Pump	346	Dual Phase	1061		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 4-20-17 **Time:** _____

Temp: 57°

Total Discharge: 11433635 Gal

Daily Discharge: 25,228 Gal

AST Pressure: 57.8 in WC

Dual Phase Vacuum: 19.4 in WC

Dual Phase Temp: 99 °F

XP Room Temp: 75 °F

AST water PH 7.10 pH(7.0-9.0)

Inf Bag Filter DP: d/o d/o PSI

Eff Bag Filter DP: d/o d/o PSI

Remaining Bag Filters: 20 #

Mag Gauge Flow: 1.95 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 3 #

Surge Counter: 25,176

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 645

Outlet Pump 771

Booster Blower 1233

AST Blower 1233

MS Pump 465

Aeration Blower ~~0~~

AST Pump 336

Dual Phase 1037

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 4-19-17 **Time:** _____

Temp: 51°

Total Discharge:	11408407	Gal	**Mag Gauge Flow:**	1.75 (1.50-2.00)	
Daily Discharge:	26,230	Gal	**System Status:** (Arrival)	ON	
AST Pressure:	59.6	in WC			
Dual Phase Vacuum:	19.4	in WC	**System Status:** (Departure)	ON	
Dual Phase Temp:	98	°F	**Sample Collected:**	No	
XP Room Temp:	69	°F	**Bag Filters Replaced:**	No	
AST water PH	9.06	pH(7.0-9.0)	**Cartridge Filters Replaced:**	No	
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	3	#
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	25,176	
Remaining Bag Filters:	20	#	**Remaining Defoamer:**	8 gals.	

Run Times

Inlet Pump	631	Outlet Pump	757	Booster Blower	1210
AST Blower	1209	MS Pump	449	Aeration Blower	Ø
AST Pump	326	Dual Phase	1013		

Maintenance Work Performed, Adjustments Made and Comments:

Acid still at 61 –

Cell 5 GW Pump and Treat System Data Log

Date: 4-18-17 **Time:** _____

Temp: 53° cloudy.

Total Discharge:	11382177	Gal	**Mag Gauge Flow:**	2.0 (1.50-2.00)
Daily Discharge:	20,246	Gal	**System Status:** (Arrival)	ON
AST Pressure:	58.0	in WC	**System Status:** (Departure)	ON
Dual Phase Vacuum:	19.1	in WC		
Dual Phase Temp:	98	°F	**Sample Collected:**	No
XP Room Temp:	72	°F	**Bag Filters Replaced:**	No
AST water PH	8.82	pH(7.0-9.0)	**Cartridge Filters Replaced:**	No
Inf Bag Filter DP:	o/o o/o	PSI	**Remianing Cartridge**	4 #
Eff Bag Filter DP:	o/o o/o	PSI	**Surge Counter:**	25,176
Remaining Bag Filters:	20	#	**Remaining Defoamer:**	10 gals.

Run Times

Inlet Pump	617	Outlet Pump	743	Booster Blower	1185
AST Blower	1185	MS Pump	432	Aeration Blower	Ø
AST Pump	316	Dual Phase	989		

Maintenance Work Performed, Adjustments Made and Comments:

repaired water leak at pre act bag filter #1
added 6 gals. of defoamer

dual phase oil last changed 6-10-16

Cell 5 GW Pump and Treat System Data Log

Date: 4-17-17 **Time:** _____

Temp: 68°

Total Discharge: 11361931 Gal 67670 ÷3

Daily Discharge: 22,556 Gal

AST Pressure: 56.6 in WC

Dual Phase Vacuum: 19.2 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 82 °F

AST water PH 6.91 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 20 #

Mag Gauge Flow: 1.95 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 4 #

Surge Counter: 25,176

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 607

Outlet Pump 732

Booster Blower 1162

AST Blower 1162

MS Pump 419

Aeration Blower 0

AST Pump 308

Dual Phase 965

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 4-14-17 **Time:** 0745

Temp: 51° Sunny.

Total Discharge: 11294261 Gal

Daily Discharge: 25,148 Gal

AST Pressure: 60.7 in WC

Dual Phase Vacuum: 18.7 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 69 °F

AST water PH 8.28 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 24 #

Mag Gauge Flow: 1.95 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 7 #

Surge Counter: 25,176

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 570

Outlet Pump 696

Booster Blower 1091

AST Blower 1090

MS Pump 376

Aeration Blower ~~0~~

AST Pump 281

Dual Phase 894

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 4-13-17 **Time:** _____

Temp: 55°

Total Discharge: 11269083 Gal

Daily Discharge: 16,675 Gal

AST Pressure: 59.6 in WC

Dual Phase Vacuum: 17.8 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 72 °F

AST water PH 8.31 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 24 #

Mag Gauge Flow: 1.95 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: Yes

Cartridge Filters Replaced: Yes

Remianing Cartridge 7 #

Surge Counter: 25,176

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 557 Outlet Pump 683 Booster Blower 1066

AST Blower 1065 MS Pump 360 Aeration Blower 0

AST Pump 270 Dual Phase 869

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 4-12-17 **Time:** _____

Temp: 59° Sunny.

Total Discharge: 11252418 Gal

Daily Discharge: 16,294 Gal

AST Pressure: 58.1 in WC

Dual Phase Vacuum: 18.0 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 75 °F

AST water PH 8.18 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 32 #

Mag Gauge Flow: 2.0 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 9 #

Surge Counter: 25,176

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 548 Outlet Pump 674 Booster Blower 1042

AST Blower 1041 MS Pump 349 Aeration Blower 0

AST Pump 264 Dual Phase 845

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 4-11-17 **Time:** _____

Temp: 54° Sunny.

Total Discharge: 11236124 Gal

Daily Discharge: 7,548 Gal

AST Pressure: 57.5 in WC

Dual Phase Vacuum: 18.0 in WC

Dual Phase Temp: 87 °F

XP Room Temp: 73 °F

AST water PH 8.30 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 32 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 2 #

Surge Counter: 25,176

Remaining Defoamer: 2 gals.

Run Times

Inlet Pump 536

Outlet Pump 666

Booster Blower 1018

AST Blower 1017

MS Pump 339

Aeration Blower ~~0~~

AST Pump 258

Dual Phase 824

Maintenance Work Performed, Adjustments Made and Comments:

see log book for 4-11-17 details

Cell 5 GW Pump and Treat System Data Log

Date: 4-10-17 **Time:** _____

Temp: 46° sunny.

Total Discharge:	11228576	Gal 32280 ÷3	**Mag Gauge Flow:**	1.90 (1.50-2.00)
Daily Discharge:	10,760	Gal	**System Status:** (Arrival)	ON
AST Pressure:	60.3	in WC		
Dual Phase Vacuum:	17.5	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	103	°F	**Sample Collected:**	NO
XP Room Temp:	73	°F	**Bag Filters Replaced:**	yes
AST water PH	3.60	pH(7.0-9.0)	**Cartridge Filters Replaced:**	yes
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	9 #
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	12,176
Remaining Bag Filters:	36	#	**Remaining Defoamer:**	5 gals.

Run Times

Inlet Pump	518	Outlet Pump	663	Booster Blower	998
AST Blower	997	MS Pump	335	Aeration Blower	0
AST Pump	256	Dual Phase	815		

Maintenance Work Performed, Adjustments Made and Comments:

adjust acid pump down 42.

Cell 5 GW Pump and Treat System Data Log

Date: 4-7-17 **Time:** _____

Temp: 46° cloudy

Total Discharge: 11196296 Gal

Daily Discharge: 11,659 Gal

AST Pressure: 58.4 in WC

Dual Phase Vacuum: 17.5 in WC

Dual Phase Temp: 83 °F

XP Room Temp: 68 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 36 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 13 #

Surge Counter: 25,174

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 458 Outlet Pump 649 Booster Blower 933

AST Blower 932 MS Pump 318 Aeration Blower ~~0~~

AST Pump 245 Dual Phase 785

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 4-6-17 **Time:** _____

Temp: 51° rain

Total Discharge:	11184637	Gal	**Mag Gauge Flow:**	1.80 (1.50-2.00)	
Daily Discharge:	7819	Gal	**System Status:** (Arrival)	ON	
AST Pressure:	58.2	in WC	**System Status:** (Departure)	ON	
Dual Phase Vacuum:	17.9	in WC			
Dual Phase Temp:	100	°F	**Sample Collected:**	No	
XP Room Temp:	70	°F	**Bag Filters Replaced:**	No	
AST water PH		pH(7.0-9.0)	**Cartridge Filters Replaced:**	No	
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	16	#
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	25,174	
Remaining Bag Filters:	40	#	**Remaining Defoamer:**	6 gals.	

Run Times

Inlet Pump	430	Outlet Pump	643	Booster Blower	903
AST Blower	903	MS Pump	310	Aeration Blower	~~0~~
AST Pump	240	Dual Phase	764		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 4-5-17 **Time:** _____

Temp: 58°

Total Discharge: 11176815 Gal

Daily Discharge: 7459 Gal

AST Pressure: 55.3 in WC

Dual Phase Vacuum: 16.0 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 76 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: d/o d/o PSI

Eff Bag Filter DP: d/o d/o PSI

Remaining Bag Filters: 44 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 19 #

Surge Counter: 75,174

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 412 Outlet Pump 639 Booster Blower 878

AST Blower 878 MS Pump 305 Aeration Blower ~~0~~

AST Pump 236 Dual Phase 748

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 4-4-17 **Time:** _____

Temp: 58°

Total Discharge: 11169356 Gal

Daily Discharge: 19,260 Gal

AST Pressure: 58.3 in WC

Dual Phase Vacuum: 19.5 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 73 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 44 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 19 #

Surge Counter: 25,174

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 407 Outlet Pump 635 Booster Blower 854

AST Blower 854 MS Pump 300 Aeration Blower ~~0~~

AST Pump 233 Dual Phase 724

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 4-3-17 **Time:** _____

Temp: 44° cloudy.

Total Discharge:	11150096	Gal 40263 ÷3	**Mag Gauge Flow:**	1.85 (1.50-2.00)
Daily Discharge:	13,421	Gal	**System Status:** (Arrival)	ON
AST Pressure:	58.8	in WC		
Dual Phase Vacuum:	17.8	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	106	°F	**Sample Collected:**	No
XP Room Temp:	65	°F	**Bag Filters Replaced:**	yes
AST water PH	9.02	pH(7.0-9.0)	**Cartridge Filters Replaced:**	yes
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge**	19 #
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	25,174
Remaining Bag Filters:	48	#	**Remaining Defoamer:**	7 gals.

Run Times

Inlet Pump	397	Outlet Pump	624	Booster Blower	835
AST Blower	835	MS Pump	290	Aeration Blower	0
AST Pump	225	Dual Phase	707		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 5-31-17

Time: 1150

Temp: 63°

Oxidizer Main Temp: — °F

System Status: ON (Arrival)

Oxidizer High Temp: — °F

Element High Temp: — °F

System Status: ON (Departure)

SVE Process Vacuum: 52.8 In WC

Sparge PSI: 12.8 PSI

Air Sample Collected: No

SVE Process Flow: 3.0 SCFM

Surge Counter: N/A.

Sparge Temp: °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	3	13	5	10	19	4	11
2	6	7.5	8	5	12	14	5	11	20	5	11
3	5	13	9	5	5.5	15	5	2	21	5	12
4	6	3	10	5	7.0	16	5	6	22	OFF	
5	5	2	11	4	9	17	3	10	23	5	11.5
6	5	11	12	3	11	18	5	11	24	5	7
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 164°

rdg. at TI 101 port 28.6 ppm.

rdg. at carbon outlet port TI 301 29.7 ppm.

rdg. at carbon outlet port TI 302 38.4 ppm.

total SCFM 186.5

SVE run time 1203 hrs.

Sparge run time 1203 hrs.

XP room temp. 80°

Sparge room temp. 81°

Cell 1 AS/SVE System Data Log

Date: 5-30-17 **Time:** _____

Temp: 57° cloudy.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

System Status: (Arrival) ON

System Status: (Departure) ON

SVE Process Vacuum: 54.4 in WC

Sparge PSI: 11.8 PSI

Air Sample Collected: yes

SVE Process Flow: 2.9 SCFM

Surge Counter: N/A.

Sparge Temp: 76 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	10	19	3	9
2	5	8	8	4	11	14	4	11	20	4	9
3	5	13	9	4	6	15	4	2	21	4	12
4	5	4	10	5	8	16	5	8	22	OFF	
5	5	2	11	3	10	17	3	10	23	4	11
6	4	11	12	3	10	18	4	9	24	4	8
									25	OFF.	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 144°

rdg. at TI 101 port 36.2 ppm

rdg. at carbon outlet port TI 301 27.5

rdg. at carbon outlet port TI 302 0.0

total SCFM 186

SVE run time 1178

Sparge run time 1178

XP room temp. 67

Sparge room temp. 73

Cell 1 AS/SVE System Data Log

Date: 5/26/17 **Time:** 1510

Temp: 71

Oxidizer Main Temp: \ °F **System Status: (Arrival)** On

Oxidizer High Temp: \ °F

Element High Temp: \ °F **System Status: (Departure)** On

SVE Process Vacuum: 49.0 in WC

Sparge PSI: 12.5 PSI **Air Sample Collected:** Y

SVE Process Flow: 2.9 SCFM

Surge Counter: \

Sparge Temp: 93 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	0	0	7	5	0	13	4	9	19	3	9
2	5	9	8	4	12	14	4	11	20	4	9
3	5	13	9	4	6	15	4	0	21	4	12
4	3	0	10	5	7	16	5	7	22	0	0
5	6	0	11	3	9	17	3	10	23	4	11
6	5	10	12	3	10	18	4	9	24	5	8
									25	3	0

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 160

rdg. at TI 101 port _____

rdg. at carbon outlet port TI 301 _____

rdg. at carbon outlet port TI 302 _____

total SCFM _____

SVE run time 1090

Sparge run time 1090

XP room temp. _____

Sparge room temp. _____

Cell 1 AS/SVE System Data Log

Date: 5/25/17 **Time:** 1350

Temp: 69

Oxidizer Main Temp: \ °F **System Status: (Arrival)** O

Oxidizer High Temp: \ °F

Element High Temp: \ °F **System Status: (Departure)** O

SVE Process Vacuum: 49.1 in WC

Sparge PSI: 11.9 PSI **Air Sample Collected:** N

SVE Process Flow: 2.8 SCFM **Surge Counter:** Unreadable

Sparge Temp: 89 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	0	0	7	5	0	13	4	9	19	3	9
2	5	8	8	4	12	14	4	11	20	4	9
3	5	13	9	4	6	15	4	10	21	4	12
4	5	0	10	5	7	16	5	7	22	0	0
5	6	0	11	3	9	17	3	10	23	4	11
6	5	10	12	3	11	18	4	9	24	5	8
									25	3	0

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 158

rdg. at TI 101 port _____

rdg. at carbon outlet port TI 301 _____

rdg. at carbon outlet port TI 302 _____

total SCFM _____

SVE run time 1064

Sparge run time 1064

XP room temp. 83

Sparge room temp. 79

Cell 1 AS/SVE System Data Log

Date: 5/24/17 **Time:** 1020

Temp: 60

Oxidizer Main Temp: \ °F **System Status: (Arrival)** O

Oxidizer High Temp: \ °F

Element High Temp: \ °F **System Status: (Departure)** O

SVE Process Vacuum: 50.2 In WC

Sparge PSI: 12.4 PSI **Air Sample Collected:** N

SVE Process Flow: 2.8 SCFM

Surge Counter: \

Sparge Temp: 83 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	0	0	7	5	4	13	4	10	19	3	9
2	5	9	8	4	12	14	4	11	20	4	9
3	5	13	9	5	6	15	4	0	21	5	12
4	5	0	10	5	8	16	5	8	22	0	0
5	5	0	11	3	9	17	3	10	23	4	11
6	5	10	12	3	10	18	4	9	24	5	8
									25	3	0

x H_2O in scfm

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 150 PI: 18

rdg. at TI 101 port

rdg. at carbon outlet port TI 301

rdg. at carbon outlet port TI 302

total SCFM

SVE run time 1047

Sparge run time 1047

XP room temp. 71

Sparge room temp. 74

Cell 1 AS/SVE System Data Log

Date: 5/23/17 **Time:** 0850

Temp: 62

Oxidizer Main Temp: \ °F **System Status: (Arrival)** On

Oxidizer High Temp: \ °F

Element High Temp: \ °F **System Status: (Departure)** On

SVE Process Vacuum: 53.5 in WC

Sparge PSI: 12.0 PSI **Air Sample Collected:** N

SVE Process Flow: 2.9 SCFM

Surge Counter: Screen Broken

Sparge Temp: 77 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	0	0	7	5	4	13	4	10	19	3	9
2	5	10	8	4	12	14	4	11	20	4	10
3	5	12	9	5	6	15	4	0	21	5	11
4	6	0	10	5	8	16	5	8	22	0	0
5	6	0	11	3	9	17	3	10	23	5	11
6	5	10	12	3	10	18	4	9	24	5	8
									25	3	0

*water in glass
*water in glass

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 148

rdg. at TI 101 port _____

rdg. at carbon outlet port TI 301 _____

rdg. at carbon outlet port TI 302 _____

total SCFM _____

SVE run time 1017

Sparge run time 1017

XP room temp. 72

Sparge room temp. 68

Cell 1 AS/SVE System Data Log

Date: 5/22/17 **Time:** 1115

Temp: 61

Oxidizer Main Temp: \ °F **System Status:** Off (Arrival)

Oxidizer High Temp: \ °F

Element High Temp: \ °F **System Status:** On (Departure)

SVE Process Vacuum: 54.1 in WC

Sparge PSI: 13.1 PSI **Air Sample Collected:** N

SVE Process Flow: 2.8 SCFM **Surge Counter:** Screen Broke

Sparge Temp: 77 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	0	0	7	5	0	13	4	10	19	3	9
2	5	9	8	5	12	14	4	11	20	4	10
3	5	13	9	5	6	15	5	0	21	5	12
4	5	0	10	5	8	16	5	7	22	0	0
5	5	0	11	3	9	17	3	10	23	4	11
6	5	11	12	3	10	18	4	9	24	5	8
									25	3	0

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 146

rdg. at TI 101 port _____

rdg. at carbon outlet port TI 301 _____

rdg. at carbon outlet port TI 302 _____

total SCFM _____

SVE run time 995

Sparge run time 995

XP room temp. 68

Sparge room temp. 72

Cell 1 AS/SVE System Data Log

Date: 5/19/17 **Time:** 0930

Temp: 81°

Oxidizer Main Temp: Off °F **System Status: (Arrival)** On

Oxidizer High Temp: ++ °F

Element High Temp: ++ °F **System Status: (Departure)** Off

SVE Process Vacuum: 47.3 in WC

Sparge PSI: 11.6 PSI **Air Sample Collected:** N

SVE Process Flow: 2.7 SCFM

Surge Counter:

Sparge Temp: 104 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	0	0	7	5	0	13	4	9	19	3	9
2	5	9	8	4	11	14	4	10	20	4	9
3	4	12	9	4	6	15	4	<5	21	4	12
4	5	0	10	5	7	16	5	8	22	0	0
5	5	0	11	2	9	17	3	9	23	4	11
6	4	10	12	3	10	18	4	9	24	4	7
									25	0	0

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 180

rdg. at TI 101 port

rdg. at carbon outlet port TI 301

rdg. at carbon outlet port TI 302

total SCFM

SVE run time 990

Sparge run time 990

XP room temp. 97

Sparge room temp. 103

System Off Over weekend due to sitewide Outage

Cell 1 AS/SVE System Data Log

Date: 5-18-17

Time: _____

Temp: 72°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 50.9 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 3.1 SCFM

Sparge Temp: 91 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Surge Counter: NA

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	10	19	3	9
2	5	9	8	4	11	14	4	11	20	4	9
3	4	13	9	4	6	15	4	2	21	4	12
4	5	4	10	5	8	16	5	8	22	OFF	
5	5	2	11	3	10	17	3	10	23	4	11
6	4	11	12	3	10	18	4	9	24	4	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 160°

rdg. at TI 101 port 54.8

rdg. at carbon outlet port TI 301 100.1

rdg. at carbon outlet port TI 302 33.5

total SCFM 187

SVE run time 971

Sparge run time 971

XP room temp. 79°

Sparge room temp. 85°

Cell 1 AS/SVE System Data Log

Date: 5-17-17 **Time:** 0810

Temp: 59° Sunny.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

System Status: (Arrival) ON

System Status: (Departure) ON

SVE Process Vacuum: 52.9 in WC

Sparge PSI: 13.1 PSI

Air Sample Collected: NO

SVE Process Flow: 2.9 SCFM

Surge Counter: NA.

Sparge Temp: 83 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	10	19	3	9
2	5	9	8	4	11	14	4	11	20	4	9
3	4	13	9	4	6	15	4	2	21	4	12
4	5	4	10	5	8	16	5	8	22	OFF	
5	5	2	11	3	10	17	3	10	23	4	11
6	4	11	12	3	10	18	4	9	24	4	8
									25	OFF.	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 154°

rdg. at TI 101 port 54.8 ppm.

rdg. at carbon outlet port TI 301 100.1 ppm.

rdg. at carbon outlet port TI 302 33.5 ppm.

total SCFM 187

SVE run time 940 hrs.

Sparge run time 940 hrs.

XP room temp. 71°

Sparge room temp. 78°

Cell 1 AS/SVE System Data Log

Date: 5-16-17 Time: 0830

Temp: 52° Sunny.

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 55.5 in WC

Sparge PSI: 12.8 PSI

SVE Process Flow: 3.0 SCFM

Sparge Temp: °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Surge Counter: NA.

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	10	19	3	9
2	5	9	8	4	12	14	4	11	20	4	9
3	4	13	9	4	6	15	4	2	21	4	12
4	5	4	10	5	8	16	5	9	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	11
6	4	11	12	3	10	18	4	9	24	4	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 152°

rdg. at TI 101 port 41.6 ppm.

rdg. at carbon outlet port TI 301 94.0 ppm

rdg. at carbon outlet port TI 302 26.6 ppm.

total SCFM 188

SVE run time 915 hrs.

Sparge run time 915 hrs.

XP room temp. 69°

Sparge room temp. 75°

Cell 1 AS/SVE System Data Log

Date: 5-15-17 Time: 1000

Temp: 53° Sunny.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 56.9 in WC

Sparge PSI: 11.7 PSI

SVE Process Flow: 2.9 SCFM

Sparge Temp: 74 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Surge Counter: NA.

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	10	19	3	9
2	5	9	8	4	12	14	4	11	20	4	9
3	4	13	9	4	6	15	4	2	21	4	12
4	5	3	10	5	8	16	5	8	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	11
6	4	11	12	3	10	18	4	9	24	4	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 150°

rdg. at TI 101 port 107.1 ppm

rdg. at carbon outlet port TI 301 179.5 ppm.

rdg. at carbon outlet port TI 302 19.1 ppm.

total SCFM 195

SVE run time 891 hrs.

Sparge run time 891 hrs.

XP room temp. 70°

Sparge room temp. 73°

Cell 1 AS/SVE System Data Log

Date: 5-12-17 Time: 0800

Temp: 53° Cloudy.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 57.8 in WC

Sparge PSI: 12.2 PSI

SVE Process Flow: 2.9 SCFM

Sparge Temp: 69.0 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Surge Counter: NA.

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	10	19	3	9
2	5	9	8	4	11	14	4	11	20	4	10
3	4	12	9	4	6	15	4	2	21	4	12
4	5	3	10	5	8	16	5	8	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	11
6	4	11	12	3	10	18	4	9	24	4	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 132°

rdg. at TI 101 port 53.1 ppm.

rdg. at carbon outlet port TI 301 29.6 ppm

rdg. at carbon outlet port TI 302 0.7 ppm.

total SCFM 185

SVE run time 819 hrs

Sparge run time 819 hrs.

XP room temp. 58°

Sparge room temp. 62°

Cell 1 AS/SVE System Data Log

Date: ~~5-11-17~~ **Time:** _____

Temp: 56° rain

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 58.1 in WC

Sparge PSI: 13.9 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 69 °F

System Status: (Arrival) OFF No electric

System Status: (Departure) ON 1400 hrs. (*) 5-11-17

Air Sample Collected: Yes

Surge Counter: N/A

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	5	13	4	10	19	3	9
2	5	9	8	4	10	14	4	12	20	4	9
3	4	12	9	4	6	15	4	2	21	4	12
4	5	3	10	5	8	16	4	8	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	12
6	4	10	12	3	10	18	4	9	24	4	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe —

rdg. at TI 101 port —

rdg. at carbon outlet port TI 301 —

rdg. at carbon outlet port TI 302 —

total SCFM —

SVE run time —

Sparge run time —

XP room temp. —

Sparge room temp. —

(*) not hot enough to collect data at 1400 hrs.

Cell 1 AS/SVE System Data Log

Date: 5-10-47 **Time:** 0830

Temp: 48°

Oxidizer Main Temp: — °F **System Status:** ON (Arrival)

Oxidizer High Temp: — °F

Element High Temp: — °F **System Status:** ON (Departure)

SVE Process Vacuum: 58.1 in WC

Sparge PSI: 13.9 PSI **Air Sample Collected:** Yes

SVE Process Flow: 2.8 SCFM

Surge Counter: NA

Sparge Temp: 69 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	5	13	4	10	19	3	9
2	5	9	8	4	10	14	4	12	20	4	9
3	4	12	9	4	6	15	4	2	21	4	12
4	5	3	10	5	8	16	4	8	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	12
6	4	10	12	3	10	18	4	9	24	4	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 138°

rdg. at TI 101 port 73.1 ppm

rdg. at carbon outlet port TI 301 56.1 ppm

rdg. at carbon outlet port TI 302 0.0 ppm

total SCFM 185

SVE run time 797

Sparge run time 797

XP room temp. 60

Sparge room temp. 64

Cell 1 AS/SVE System Data Log

Date: 5-9-17 **Time:** 0120

Temp: 50°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

System Status: (Arrival) OFF NO power

System Status: (Departure) ON

SVE Process Vacuum: 50.5 in WC

Sparge PSI: 12.8 PSI

Air Sample Collected: NO

SVE Process Flow: 2.7 SCFM

Surge Counter: NA

Sparge Temp: °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	10	19	3.5	9
2	5	8	8	4	10	14	4	12	20	4.5	10
3	5	12	9	4.5	6	15	4	2	21	4	12
4	5	4	10	5	7.5	16	5	8	22	OFF	
5	5	2	11	3	9	17	3.5	10	23	4	12
6	4.5	10	12	3	10	18	4	9	24	5	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 160°

rdg. at TI 101 port 110.7 ppm

rdg. at carbon outlet port TI 301 67.4 ppm.

rdg. at carbon outlet port TI 302 1.2 ppm

total SCFM 184.5

SVE run time 180

Sparge run time 180°

XP room temp. 78°

Sparge room temp. 75°

Cell 1 AS/SVE System Data Log

Date: 5-8-17 **Time:** _____

Temp: 45°

Oxidizer Main Temp: – °F **System Status:** ON (Arrival)

Oxidizer High Temp: – °F

Element High Temp: – °F **System Status:** ON (Departure)

SVE Process Vacuum: 58.4 In WC

Sparge PSI: 11.9 PSI **Air Sample Collected:** NO

SVE Process Flow: 2.9 SCFM

Surge Counter: NA.

Sparge Temp: _____ °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	9	19	3	9
2	5	9	8	4	10	14	4	12	20	4	9
3	4	12	9	4	6	15	4	2	21	4	12
4	5	3	10	5	9	16	5	8	22	OFF	
5	5	3	11	3	9	17	3	10	23	4	11
6	4	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 132°

rdg. at TI 101 port 38.6 ppm

rdg. at carbon outlet port TI 301 31.5 ppm

total SCFM 185

SVE run time 772 hrs

Sparge run time 772 hrs.

XP room temp. 54°

Sparge room temp. 59°

Cell 1 AS/SVE System Data Log

Date: 5-5-17 **Time:** _____

Temp: 60° rain

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: OFF — No power
(Arrival) 06:02 AM. power fault alarm

System Status: OFF No power
(Departure)

Air Sample Collected: No

Surge Counter: NA

PSI	SCFM	PSI	SCFM	PSI	SCFM	PSI	SCFM
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe _____

rdg. at TI 101 port _____

rdg. at carbon outlet port TI 301 _____

total SCFM _____

SVE run time _____

Sparge run time _____

XP room temp. _____

Sparge room temp. _____

Cell 1 AS/SVE System Data Log

Date: 5-4-17 **Time:** 0650

Temp: 52°

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 56.9 in WC

Sparge PSI: 13.2 PSI

SVE Process Flow: 3.0 SCFM

Sparge Temp: 71 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: yes

Surge Counter: N/A

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	5	13	4	10	19	3	9
2	5	11	8	4	13	14	4	10	20	4	8
3	4	12	9	4	6	15	4	2	21	4	12
4	5	5	10	5	9	16	4	8	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	11
6	4	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 132°

rdg. at TI 101 port 41.5 ppm

rdg. at carbon outlet port TI 301 44.5 ppm

total SCFM 190

SVE run time 684

Sparge run time 684

XP room temp. 57°

Sparge room temp. 63°

Cell 1 AS/SVE System Data Log

Date: 5-3-17 **Time:** _____

Temp: 60°

Oxidizer Main Temp: – °F **System Status: (Arrival)** ON

Oxidizer High Temp: – °F

Element High Temp: – °F **System Status: (Departure)** ON

SVE Process Vacuum: 53.4 in WC

Sparge PSI: 11.8 PSI **Air Sample Collected:** Yes.

SVE Process Flow: 2.9 SCFM

Surge Counter: N/A

Sparge Temp: 79. °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	4	5	13	4	10	19	3	9
2	5	11	8	4	13	14	4	10	20	4	8
3	4	12	9	4	6	15	4	2	21	4	12
4	5	5	10	5	8	16	4	7	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	10
6	4	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 150°

rdg. at TI 101 port 56.8 ppm

rdg. at carbon outlet port TI 301 75.9

total SCFM 187.

SVE run time 660

Sparge run time 660

XP room temp. 70°

Sparge room temp. 71°

Cell 1 AS/SVE System Data Log

Date: 5-2-17 **Time:** _____

Temp: 69°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 50.6 in WC

Sparge PSI: 12.3 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 88 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: yes

Surge Counter: N/A.

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	4	5	13	4	10	19	3	9
2	5	11	8	4	13	14	4	10	20	4	8
3	4	12	9	4	6	15	4	2	21	4	12
4	5	5	10	5	8	16	4	7	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	10
6	4	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 160°

rdg. at TI 101 port 82 ppm 71.3

rdg. at carbon outlet port TI 301 111.2 ppm

total SCFM 189

SVE run time 636

Sparge run time 636

XP room temp. 77

Sparge room temp. 83

Cell 1 AS/SVE System Data Log

Date: 5-1-17 **Time:** _____

Temp: 80°

Oxidizer Main Temp: / °F **System Status: (Arrival)** ON

Oxidizer High Temp: / °F

Element High Temp: / °F **System Status: (Departure)** ON

SVE Process Vacuum: 49.2 in WC

Sparge PSI: 12.6 PSI **Air Sample Collected:** yes

SVE Process Flow: 2.8 SCFM

Surge Counter: N/A

Sparge Temp: 96 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	4	5	13	4	10	19	3	9
2	5	11	8	4	13	14	4	10	20	4	8
3	4	12	9	4	6	15	4	3	21	4	11
4	5	5	10	5	8	16	5	7	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	10
6	4	10	12	3	10	18	4	9	24	4	9
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 140°

rdg. at TI 101 port 105.3 ppm

rdg. at carbon outlet port TI 301 98.3 ppm

total SCFM 187

SVE run time 618

Sparge run time 618

XP room temp. _____

Sparge room temp. _____

Cell 2 AS/SVE System Data Log

Date: 5-31-17 **Time:** _____

Temp: 63° Fog.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 19.8 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 66 °F

System Status: ON SVE only.
(Arrival)

System Status: ON SVE only.
(Departure)

Air Sample Collected: NO

Sparge Run Time: 0

Surge Counter: 316

SVE run time 1250

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5-30-17 **Time:** _____

Temp: 57° cloudy.

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 20.2 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 63 °F

System Status: (Arrival) ON SVE ONly

System Status: (Departure) ON SVE only.

Air Sample Collected: NO

Sparge Run Time: 0

Surge Counter: 316

SVE run time 1228 hrs.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5/26/17 **Time:** 1345

Temp: 71

Oxidizer Main Temp: \ °F

Oxidizer High Temp: \ °F

Element High Temp: \ °F

SVE Process Vacuum: 19 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 75 °F

System Status: (Arrival) On SVE ONLY

System Status: (Departure) SVE ONLY

Air Sample Collected: Y

~~Sparge Run~~ SVE Time: 1139

Surge Counter: 316

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5/25/17 **Time:** 1400

Temp: 69

Oxidizer Main Temp: \ °F

Oxidizer High Temp: \ °F

Element High Temp: \ °F

SVE Process Vacuum: 19.1 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 72 °F

System Status: On
(Arrival)

System Status: On
(Departure)

Air Sample Collected: N

~~Sparge~~ SVE Run Time: 1113

Surge Counter: 316

Maintenance Work Performed, Adjustments Made and Comments:

Sparge Motor not online. Needs rebuild.

Oxidizer Not online. Switching to Carbons

Cell 2 AS/SVE System Data Log

Date: 5/24/17 **Time:** 1515

Temp: 60

Oxidizer Main Temp: \ °F

Oxidizer High Temp: \ °F

Element High Temp: \ °F

SVE Process Vacuum: 18.7 in WC

Sparge PSI: 0.0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 69 °F

System Status: On
(Arrival)

System Status: On
(Departure)

Air Sample Collected: N

SVE ~~Sparge~~ Run Time: 1090

Surge Counter: 316

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5/23/17 **Time:** 910

Temp: 62

Oxidizer Main Temp: \ °F

Oxidizer High Temp: \ °F

Element High Temp: \ °F

SVE Process Vacuum: 20.0 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.5 SCFM

Sparge Temp: 63 °F

System Status: On
(Arrival)

System Status: On
(Departure)

Air Sample Collected: N

Sparge Run Time: 0

Surge Counter: 316

SVE run time: 1060 Hours

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5/22/17 **Time:** ~~105~~ 1100

Temp: 61

Oxidizer Main Temp: \ °F

Oxidizer High Temp: \ °F

Element High Temp: \ °F

SVE Process Vacuum: 21.1 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 63 °F

System Status: Off
(Arrival)

System Status: On
(Departure)

Air Sample Collected: N

Sparge Run Time: 0

Surge Counter: 316

SVE Run Time: 1038 hrs.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5/19/17 **Time:** 0945

Temp: 81

Oxidizer Main Temp: Off °F

Oxidizer High Temp: " °F

Element High Temp: " °F

SVE Process Vacuum: 17.1 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 85 °F

System Status: (Arrival) On

System Status: (Departure) Off

Air Sample Collected: N

Sparge Run Time: 0

Surge Counter: 313

SVE RUN : 1035 hours

Maintenance Work Performed, Adjustments Made and Comments:

Shut down for Outage this weekend

Cell 2 AS/SVE System Data Log

Date: 5-18-17 **Time:** _____

Temp: 72°

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 17.4 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 81 °F

System Status: (Arrival) SVE only.

System Status: (Departure) SVE only.

Air Sample Collected: No

Sparge Run Time: 0

Surge Counter: 313

SVE run time 984

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5-17-17 **Time:** _____

Temp: 59° Sunny.

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 19.5 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 70 °F

System Status: SVE only
(Arrival)

System Status: SVE only
(Departure)

Air Sample Collected: No

Sparge Run Time: Ø

Surge Counter: 313

SVE run time 984

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5-16-17 **Time:** _____

Temp: 52°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 20.6 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 67 °F

System Status: SVE only
(Arrival)

System Status: SVE only
(Departure)

Air Sample Collected: No

Sparge Run Time: Ø

Surge Counter: 313

SVE run time 936

Maintenance Work Performed, Adjustments Made and Comments:

w/parts sparge compressor

Cell 2 AS/SVE System Data Log

Date: 5-15-17 **Time:** _____

Temp: 53° SUNNY

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 21.2 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 62 °F

System Status: SVE only
(Arrival)

System Status: SVE only
(Departure)

Air Sample Collected: No

Sparge Run Time: 0

Surge Counter: 313

SVE RUN TIME 936

Maintenance Work Performed, Adjustments Made and Comments:

W/ parts sparge compressor

Cell 2 AS/SVE System Data Log

Date: 5-12-17 **Time:** _____

Temp: 53 cloudy.

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 21.5 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 61 °F

System Status: (Arrival) SVE on only

System Status: (Departure) SVE on only

Air Sample Collected: No

Sparge Run Time: Ø

Surge Counter: 313

SVE run time 863.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5-11-17 **Time:** _____

Temp: 56°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 20.6 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 66 °F

System Status: SVE on only
(Arrival)

System Status: SVE on only
(Departure)

Air Sample Collected: No

Sparge Run Time: Ø

Surge Counter: 313

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5-10-17 **Time:** _____

Temp: 48°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 21.8 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 60 °F

System Status: SVE on only
(Arrival)

System Status: SVE on only
(Departure)

Air Sample Collected: NO

Sparge Run Time: 0

Surge Counter: 313

SVE run time 816

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5-9-17 **Time:** _____

Temp: 43°

Oxidizer Main Temp: - °F

Oxidizer High Temp: - °F

Element High Temp: - °F

SVE Process Vacuum: 22.1 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 57 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: Ø

Surge Counter: 313

SVE run time 792

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5-8-17 **Time:** _____

Temp: 45°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 25.0 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 56 °F

System Status: (Arrival) ON SVE only

System Status: (Departure) ON SVE only

Air Sample Collected: NO

Sparge Run Time: Ø

Surge Counter: 313

SVE Run time 768

Maintenance Work Performed, Adjustments Made and Comments:

W/parts sparge compressor

Cell 2 AS/SVE System Data Log

Date: 5-5-17 **Time:** _____

Temp: 60 rain

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 21.6 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 65 °F

System Status: (Arrival) ON SVE only

System Status: (Departure) ON SVE only

Air Sample Collected: NO

Sparge Run Time: Ø

SVE run time 696

Surge Counter: 313

Maintenance Work Performed, Adjustments Made and Comments:

w/parts sparge compressor

Cell 2 AS/SVE System Data Log

Date: 5-4-17 **Time:** _____

Temp: 56°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 21.8 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 62 °F

System Status: (Arrival) SVE on only

System Status: (Departure) SVE on only

Air Sample Collected: No

Sparge Run Time: Ø

Surge Counter: 313

SVE Run time 673

Maintenance Work Performed, Adjustments Made and Comments:

w/ for sparge compressor

Cell 2 AS/SVE System Data Log

Date: 5-3-17 **Time:** _____

Temp: 60°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 21.1 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 68 °F

System Status: (Arrival) ON SVE only

System Status: (Departure) ON

Air Sample Collected: No

Sparge Run Time: Ø

Surge Counter: 313

SVE run time 648

Maintenance Work Performed, Adjustments Made and Comments:

w/ parts sparge compressor

Cell 2 AS/SVE System Data Log

Date: 5-2-17 **Time:** _____

Temp: 69°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 19.9 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 76 °F

System Status: Running SVE only
(Arrival)

System Status: RUNNING SVE only
(Departure)

Air Sample Collected: No

Sparge Run Time: 0
SVE " " 624

Surge Counter: 313

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 5-1-17 **Time:** _____

Temp: 80°

Oxidizer Main Temp: - °F

Oxidizer High Temp: - °F

Element High Temp: - °F

SVE Process Vacuum: 19.4 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 81 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 0

Surge Counter: _____

SVE run time 606

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5-31-17 **Time:** 0900

Temp: 63° Fog

Total Discharge:	292653	gal	**Mag Gauge Flow:**	.90	(0.50-1.0)
Daily Discharge	12,521	gal	**System Status:** (Arrival)	ON	
AST Pressure:	61.4	in WC			
Oxidizer Main Temp:	663.4	°F	**System Status:** (Departure)	ON	
Oxidizer High Temp:	629.9	°F	**Sample Collected:**	NO	
Element Temp:	856	°F	**Bag Filters Replaced:**	NO	
Room Temp:	67.5	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	8.22	PH			
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge Filters:**	30	
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	30	#	**Defoamer level:**	10 gals.	

Run Times (hours)

Inlet pump 128 AST Pump 178 MS Pump 6

AST Blower 617 Outlet Pump 250 GW Pumps #4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5-30-17 **Time:** 1030

Temp: 57° cloudy.

Total Discharge: 280132 gal

Daily Discharge 14,913 gal

AST Pressure: 60.1 in WC

Oxidizer Main Temp: 641.5 °F

Oxidizer High Temp: 618.2 °F

Element Temp: 895. °F

Room Temp: 68.8 °F

Inf water PH 8.47 PH

Inf Bag Filter DP: o/o o/o PSI

Eff Bag Filter DP: o/o o/o PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: on (Arrival)

System Status: on (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: Ø

Remianing Cartridge Filters: 30

Surge Counter: 249

Defoamer level: full

Run Times (hours)

Inlet pump 123 AST Pump 174 MS Pump 6

AST Blower 594 Outlet Pump 239 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5/26/17 **Time:** 1545

Temp: 71

Total Discharge: 250306 gal

Daily Discharge _____ gal

AST Pressure: 60.2 in WC

Oxidizer Main Temp: 641.1 °F

Oxidizer High Temp: 613.2 °F

Element Temp: 844 °F

Room Temp: 71.7 °F

Inf water PH 7.30 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: Y

Bag Filters Replaced: N

Cartridge Filters Replaced: —

Remianing Cartridge Filters: —

Surge Counter: 249

Defoamer level: 5 Gallons

Run Times (hours)

Inlet pump 113 AST Pump 165 MS Pump 6

AST Blower 506 Outlet Pump 213 GW Pumps _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5/25/17 **Time:** 1355

Temp: 69

Total Discharge: 242036 gal

Daily Discharge 12,648 gal

AST Pressure: 60.5 in WC

Oxidizer Main Temp: 635.8 °F

Oxidizer High Temp: 643.7 °F

Element Temp: 919 °F

Room Temp: 69.9 °F

Inf water PH 7.32 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 0.75 (0.50-1.0)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: Y

Bag Filters Replaced: Y

Cartridge Filters Replaced: —

Remianing Cartridge Filters: —

Surge Counter: 249

Defoamer level: 5 Gallons

Run Times (hours)

Inlet pump 110 AST Pump 162 MS Pump 5

AST Blower 492 Outlet Pump 206 GW Pumps _____

Maintenance Work Performed, Adjustments Made and Comments:

Defoamer Pump working, System ran over night, will monitor.

Cell 2 GW Pump and Treat System Data Log

Date: 5/24/17 **Time:** 1500

Temp: 60

Total Discharge: 229388 gal

Daily Discharge 4,956 gal

AST Pressure: 60.5 in WC

Oxidizer Main Temp: 664.6 °F

Oxidizer High Temp: 670.1 °F

Element Temp: 930 °F

Room Temp: 66.8 °F

Inf water PH _____ PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 0.75 (0.50-1.0)

System Status: (Arrival) Off

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge Filters: \

Surge Counter: 249

Defoamer level: 6 Gallons

Run Times (hours)

Inlet pump 105 AST Pump 159 MS Pump 5

AST Blower 469 Outlet Pump 195 GW Pumps \

Maintenance Work Performed, Adjustments Made and Comments:

Defoamer pump not operating, tried rebuilding pump. Got same results, No suction. Craig from PRM is going to rebuild defoamer pump. Defoamer is ~~because~~ the cause for MS High Level Alarm. Sponge in AS gets soaked, weighed down, H_2O pushes over to MS Tank → High Level

Cell 2 GW Pump and Treat System Data Log

Date: 5/23/17 **Time:** 0900

Temp: 62

Total Discharge:	224432	gal	**Mag Gauge Flow:**	0.75 (0.50-1.0)
Daily Discharge	12,609	gal	**System Status: (Arrival)**	On
AST Pressure:	62	in WC	**System Status: (Departure)**	On
Oxidizer Main Temp:	634.1	°F		
Oxidizer High Temp:	614.4	°F	**Sample Collected:**	~~N~~ Y
Element Temp:	985	°F	**Bag Filters Replaced:**	
Room Temp:	64.1	°F	**Cartridge Filters Replaced:**	\
Inf water PH	7.35	PH		
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge Filters:**	\
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	249
Remaining Bag Filters:	\	#	**Defoamer level:**	5 Gallons

Run Times (hours)

Inlet pump	103	AST Pump	158	MS Pump	2
AST Blower	461	Outlet Pump	191	GW Pumps	~~[illegible]~~

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5/22/17 **Time:** 1055

Temp: 62°

Total Discharge: 211,823 gal 2302 ÷ 3

Daily Discharge 767. gal

AST Pressure: 62.6 in WC

Oxidizer Main Temp: 637.6 °F

Oxidizer High Temp: 715.0 °F

Element Temp: 849 °F

Room Temp: 64.1 °F

Inf water PH PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: \ #

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) Off

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: N

Cartridge Filters Replaced: \

Remianing Cartridge Filters: \

Surge Counter: 249

Defoamer level: 3/4 full

Run Times (hours)

Inlet pump 98 AST Pump 155 MS Pump 2

AST Blower 439 Outlet Pump 180 GW Pumps

Maintenance Work Performed, Adjustments Made and Comments:

System was off over weekend. Daily discharge was from ~~morning~~ Friday afternoon.

Cell 2 GW Pump and Treat System Data Log

Date: 5/19/17 **Time:** 0930

Temp: 81

Total Discharge: 209521 gal

Daily Discharge 13,162 gal

AST Pressure: 60.0 in WC

Oxidizer Main Temp: 661.3 °F

Oxidizer High Temp: 632.6 °F

Element Temp: 935 °F

Room Temp: 76.9 °F

Inf water PH 7.80 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.15 (0.50-1.0)

System Status: (Arrival) On

System Status: (Departure) Off

Sample Collected: N

Bag Filters Replaced: N

Cartridge Filters Replaced: \

Remianing Cartridge Filters: \

Surge Counter: 249

Defoamer level: 3/4 full

Run Times (hours)

Inlet pump 98 AST Pump 155 MS Pump 2

AST Blower 435 Outlet Pump 178 GW Pumps _____

Maintenance Work Performed, Adjustments Made and Comments:

Shutdown for Outage this weekend

Cell 2 GW Pump and Treat System Data Log

Date: 5-18-17 **Time:** 0700

Temp: 72° Sunny.

Total Discharge: 196359. gal

Daily Discharge 8383 gal

AST Pressure: 60.8 in WC

Oxidizer Main Temp: 633.4 °F

Oxidizer High Temp: 616.9 °F

Element Temp: 884 °F

Room Temp: 75.9 °F

Inf water PH 8.31 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 28 #

Mag Gauge Flow: 1.15 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: ~~0~~

Surge Counter: 249

Defoamer level: 7 gals.

Run Times (hours)

Inlet pump 93 AST Pump 149 MS Pump 2

AST Blower 409 Outlet Pump 167 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5-17-17 **Time:** 0850

Temp: 59° SUNNY

Total Discharge: 18,7976 gal

Daily Discharge 11,370 gal

AST Pressure: 62.6 in WC

Oxidizer Main Temp: 651.9 °F

Oxidizer High Temp: 665.2 °F

Element Temp: 832 °F

Room Temp: 64.9 °F

Inf water PH 8.06 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 28 #

Mag Gauge Flow: 1.05 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: 0

Remianing Cartridge Filters: 0

Surge Counter: 249

Defoamer level: 6 gals.

Run Times (hours)

Inlet pump 89 AST Pump 132 MS Pump 2 hrs.

AST Blower 384 Outlet Pump 160 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5-16-17 **Time:** _____

Temp: 52°

Total Discharge: 176598 gal

Daily Discharge 11,810 gal

AST Pressure: 62.9 in WC

Oxidizer Main Temp: 638.2 °F

Oxidizer High Temp: 626.9 °F

Element Temp: 949. °F

Room Temp: 62.7 °F

Inf water PH 7.21 PH

Inf Bag Filter DP: do do PSI

Eff Bag Filter DP: do do PSI

Remaining Bag Filters: 28 #

Mag Gauge Flow: 1.15 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 249

Defoamer level: 6 gals.

Run Times (hours)

Inlet pump 85 AST Pump 122 MS Pump 2

AST Blower 360 Outlet Pump 151 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5-15-17 **Time:** _____

Temp: 53° SUNNY.

Total Discharge: 164788 gal 17938 ÷3

Daily Discharge 5979 gal

AST Pressure: 60.9 in WC

Oxidizer Main Temp: 642.9 °F

Oxidizer High Temp: 614.5 °F

Element Temp: 866 °F

Room Temp: 62.3 °F

Inf water PH 8.40 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 28 #

Mag Gauge Flow: 1.45 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: _____

Cartridge Filters Replaced: Ø

Remianing Cartridge Filters: Ø

Surge Counter: 249

Defoamer level: 8 gals.

Run Times (hours)

Inlet pump 80 AST Pump 117 MS Pump 2

AST Blower 337 Outlet Pump 140 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

air stripper high level alarm on

Cell 2 GW Pump and Treat System Data Log

Date: 5-12-17 **Time:** 0830

Temp: 53° cloudy.

Total Discharge: 146850 gal

Daily Discharge 11,188 gal

AST Pressure: 62.7 in WC

Oxidizer Main Temp: 643.2 °F

Oxidizer High Temp: 720.7 °F

Element Temp: 845 °F

Room Temp: 59.7 °F

Inf water PH 8.65 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 3 #

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 249.

Defoamer level: 10 gals.

Run Times (hours)

Inlet pump 73 AST Pump 61 MS Pump 2

AST Blower 266 Outlet Pump 127 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5-11-17 **Time:** 1030

Temp: 56° Rain

Total Discharge:	135662	gal	**Mag Gauge Flow:**	1.25	(0.50-1.0)
Daily Discharge	14,356	gal	**System Status: (Arrival)**	ON	
AST Pressure:	62.6	in WC			
Oxidizer Main Temp:	650.8	°F	**System Status: (Departure)**	ON	
Oxidizer High Temp:	631.0	°F	**Sample Collected:**	No	
Element Temp:	883	°F	**Bag Filters Replaced:**	No	
Room Temp:	62.6	°F	**Cartridge Filters Replaced:**	No	
Inf water PH	8.18	PH			
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge Filters:**	Ø	
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	36	#	**Defoamer level:**	7 gals.	

Run Times (hours)

Inlet pump 68 AST Pump 57 MS Pump 2

AST Blower 246 Outlet Pump 117 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5-10-17 **Time:** _____

Temp: 48°

Total Discharge:	121306	gal	**Mag Gauge Flow:**	1.25	(0.50-1.0)
Daily Discharge	3876	gal	**System Status: (Arrival)**	OFF	
AST Pressure:	61.9	in WC			
Oxidizer Main Temp:	665.9	°F	**System Status: (Departure)**	ON	
Oxidizer High Temp:	643.9	°F	**Sample Collected:**	NO	
Element Temp:	883	°F	**Bag Filters Replaced:**	NO	
Room Temp:	52.8	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	8.38	PH			
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge Filters:**	0	
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	36	#	**Defoamer level:**	7 gals.	

Run Times (hours)

Inlet pump 62 AST Pump 51 MS Pump 2

AST Blower 219 Outlet Pump 105 GW Pumps #4 pump is on

Maintenance Work Performed, Adjustments Made and Comments:

M/s high level alarm

Cell 2 GW Pump and Treat System Data Log

Date: 5-9-17 **Time:** _____

Temp: 43°

Total Discharge:	117430	gal	**Mag Gauge Flow:**	.90	(0.50-1.0)
Daily Discharge	8584	gal *	**System Status: (Arrival)**	OFF	
AST Pressure:	64.9	in WC	**System Status: (Departure)**	ON	
Oxidizer Main Temp:	659.9	°F			
Oxidizer High Temp:	644.9	°F	**Sample Collected:**	NO	
Element Temp:	838	°F	**Bag Filters Replaced:**	NO	
Room Temp:	51.4	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	8.18	PH	**Remianing Cartridge Filters:**	~~0~~	
Inf Bag Filter DP:	o/o o/o	PSI			
Eff Bag Filter DP:	o/o o/o	PSI	**Surge Counter:**	249.	
Remaining Bag Filters:	36	#	**Defoamer level:**	8 gals.	

Run Times (hours)

Inlet pump	60	AST Pump	49	MS Pump	2
AST Blower	212	Outlet Pump	102	GW Pumps	#4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

* MS tank high leveled –

Cell 2 GW Pump and Treat System Data Log

Date: 5-8-17 **Time:** _____

Temp: 45°

Total Discharge: 108846 gal 40410 ÷3

Daily Discharge 13,470 gal

AST Pressure: 62.7 in WC

Oxidizer Main Temp: 660.9 °F

Oxidizer High Temp: 640.6 °F

Element Temp: 955.6 °F

Room Temp: 56 °F

Inf water PH 8.55 PH

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: .90 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: ~~#6~~ yes

Cartridge Filters Replaced: No

Remianing Cartridge Filters: 0

Surge Counter: 249.

Defoamer level: 8 gals.

Run Times (hours)

Inlet pump 55 AST Pump 45 MS Pump 2

AST Blower 197 Outlet Pump 95 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Inlet pump set on 45

Defoamer set on 60

Cell 2 GW Pump and Treat System Data Log

Date: 5-5-17 **Time:** _____

Temp: 60° rain

Total Discharge:	68436	gal	**Mag Gauge Flow:**	.90	(0.50-1.0)
Daily Discharge	13,447	gal	**System Status:** (Arrival)	ON	
AST Pressure:	61.3	in WC			
Oxidizer Main Temp:	670.5	°F	**System Status:** (Departure)	ON	
Oxidizer High Temp:	6026	°F	**Sample Collected:**	No	
Element Temp:	917	°F	**Bag Filters Replaced:**	Yes	
Room Temp:	64	°F	**Cartridge Filters Replaced:**	No	
Inf water PH	8.44	PH			
Inf Bag Filter DP:	do do	PSI	**Remianing Cartridge Filters:**	0	
Eff Bag Filter DP:	do do	PSI	**Surge Counter:**	249.	
Remaining Bag Filters:	8	#	**Defoamer level:**	10 gals.	

Run Times (hours)

Inlet pump	35	AST Pump	29	MS Pump	2
AST Blower	125	Outlet Pump	60	GW Pumps	#4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

set inlet pump up to 45
defoamer on 60

Cell 2 GW Pump and Treat System Data Log

Date: 5-4-17 **Time:** 0711

Temp: 52°

Total Discharge: 54,989 gal

Daily Discharge 5942 gal

AST Pressure: 63.9 in WC

Oxidizer Main Temp: 670.5 °F

Oxidizer High Temp: 683.1 °F

Element Temp: 950 °F

Room Temp: 59.6 °F

Inf water PH 8.39 PH

Inf Bag Filter DP: do PSI

Eff Bag Filter DP: do PSI

Remaining Bag Filters: 8 #

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: 0

Remianing Cartridge Filters: 0

Surge Counter: 249

Defoamer level: 5 gals.

Run Times (hours)

Inlet pump 27 AST Pump 24 MS Pump 2

AST Blower 101 Outlet Pump 48 GW Pumps #4 on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5-3-17 **Time:** _____

Temp: 60°

Total Discharge:	49047	gal	**Mag Gauge Flow:**	1.0	(0.50-1.0)
Daily Discharge	5905	gal	**System Status: (Arrival)**	OFF	
AST Pressure:	57.5	in WC	**System Status: (Departure)**	ON	
Oxidizer Main Temp:	630.8	°F			
Oxidizer High Temp:	630.2	°F	**Sample Collected:**	NO	
Element Temp:	835	°F	**Bag Filters Replaced:**	NO	
Room Temp:	65.5	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	8.23	PH			
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge Filters:**	25	
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	12	#	**Defoamer level:**	5 gals.	

Run Times (hours)

Inlet pump 31 AST Pump 22 MS Pump 0

AST Blower 86 Outlet Pump 42 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5-2-17 **Time:** _____

Temp: 69°

Total Discharge:	43142	gal	**Mag Gauge Flow:**	1.75	(0.50-1.0)
Daily Discharge	5093	gal	**System Status:** (Arrival)	OFF	
AST Pressure:	59.5	in WC			
Oxidizer Main Temp:	634.7	°F	**System Status:** (Departure)	ON	
Oxidizer High Temp:	638.2	°F	**Sample Collected:**	NO	
Element Temp:	835	°F	**Bag Filters Replaced:**	yes	
Room Temp:	68.5	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH 8.13	8.23	PH			
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge Filters:**	Ø	
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	8	#	**Defoamer level:**	7 gals	

Run Times (hours)

Inlet pump 19 AST Pump 19 MS Pump Ø

AST Blower 77 Outlet Pump 38 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 5-1-17 **Time:** 1022

Temp: 75°

Total Discharge:	38049	gal *	**Mag Gauge Flow:**	(0.50-1.0)
Daily Discharge	N/A	gal	**System Status: (Arrival)**	ON
AST Pressure:	60.8	in WC		
Oxidizer Main Temp:	639.5	°F	**System Status: (Departure)**	ON
Oxidizer High Temp:	626.7	°F	**Sample Collected:**	No
Element Temp:	836	°F	**Bag Filters Replaced:**	No
Room Temp:	72.4	°F	**Cartridge Filters Replaced:**	No
Inf water PH	8.13	PH		
Inf Bag Filter DP:	0/0 0/0	PSI	**Remianing Cartridge Filters:**	
Eff Bag Filter DP:	0/0 0/0	PSI	**Surge Counter:**	249
Remaining Bag Filters:	25.	#	**Defoamer level:**	

Run Times (hours)

Inlet pump	17	AST Pump	16	MS Pump	0
AST Blower	68	Outlet Pump	34	GW Pumps	#4 on

Maintenance Work Performed, Adjustments Made and Comments:

* Computer system changed from to NES - total discharge readings don't match up to old readings. Need one day to recalculate the daily discharge readings.

Cell 3 AS/SVE System Data Log

Date: 5-31-17 **Time:** 1120

Temp: 63° Fog.

SVE Process Vacuum:	37.9 in WC	**System Status: (Arrival)**	OFF
Sparge PSI:	9.9 PSI	**System Status: (Departure)**	on
SVE Process Flow:	1.5 SCFM		
Sparge Temp:	85.2 °F	**Air Sample Collected:**	NO
Control Room Temp:	58 °F	**SVE Run Time:**	1200
XP Room Temp:	64 °F	**Sparge Run Time:**	1200

Maintenance Work Performed, Adjustments Made and Comments:

power alarm was on at 0700 AM. Reset the alarm; ran the cell; No issues, left running

opened the air vents on the cell door - reinstalled the screens in the door panels - swepted the floor of debris

Cell 3 AS/SVE System Data Log

Date: 5-30-17 **Time:** _____

Temp: 57° cloudy.

SVE Process Vacuum:	40.0	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.8	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.4	SCFM		
Sparge Temp:	73.1	°F	**Air Sample Collected:**	NO
Control Room Temp:	50	°F	**SVE Run Time:**	1174
XP Room Temp:	52	°F	**Sparge Run Time:**	1174

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 AS/SVE System Data Log

Date: 5/26/17 **Time:** 1550

Temp: 71

SVE Process Vacuum: 42.5 in WC

Sparge PSI: 9.5 PSI

SVE Process Flow: 1.4 SCFM

Sparge Temp: 87.1 °F

Control Room Temp: 55 °F

XP Room Temp: 59 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: Y

SVE Run Time: 1085

Sparge Run Time: 1085

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Cell 3

Date: 5/25/17 **Time:** 1405

Temp: 69.

SVE Process Vacuum:	44.9	in WC	**System Status:** (Arrival)	On
Sparge PSI:	9.7	PSI	**System Status:** (Departure)	On
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	83.9	°F	**Air Sample Collected:**	N
Control Room Temp:	55	°F	**SVE Run Time:**	1059
XP Room Temp:	60	°F	**Sparge Run Time:**	1059

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 AS/SVE System Data Log

Date: 5/24/17 **Time:** 1520

Temp: 60

SVE Process Vacuum:	42 in WC	**System Status: (Arrival)**	On
Sparge PSI:	9.1 PSI	**System Status: (Departure)**	On
SVE Process Flow:	1.4 SCFM		
Sparge Temp:	79.2 °F	**Air Sample Collected:**	N
Control Room Temp:	53 °F	**SVE Run Time:**	1042
XP Room Temp:	58 °F	**Sparge Run Time:**	1042

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5/23/17 **Time:** 0910

Temp: 61

SVE Process Vacuum: 41.5 in WC

Sparge PSI: 8.7 PSI

SVE Process Flow: 1.4 ~~SCFM~~ IN WC

Sparge Temp: 71.9 °F

Control Room Temp: 50 °F

XP Room Temp: 52 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

SVE Run Time: 1012

Sparge Run Time: 1012

Maintenance Work Performed, Adjustments Made and Comments:

~~Cell 3~~ AS/SVE System Data Log

Cell 3

Date: 5/22/17 **Time:** 1100

Temp: 61

SVE Process Vacuum:	40.4	in WC	**System Status: (Arrival)**	Off
Sparge PSI:	9.2	PSI	**System Status: (Departure)**	On
SVE Process Flow:	1.4	SCFM		
Sparge Temp:	71.1	°F	**Air Sample Collected:**	N
Control Room Temp:	48	°F	**SVE Run Time:**	990
XP Room Temp:	49	°F	**Sparge Run Time:**	990

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5/19/17 **Time:** 1000

Temp: 81

SVE Process Vacuum:	37.5	in WC	**System Status: (Arrival)**	On
Sparge PSI:	9.9	PSI	**System Status: (Departure)**	Off
SVE Process Flow:	1.4	SCFM		
Sparge Temp:	95.5	°F	**Air Sample Collected:**	N
Control Room Temp:	62	°F	**SVE Run Time:**	987
XP Room Temp:	67	°F	**Sparge Run Time:**	987

Maintenance Work Performed, Adjustments Made and Comments:

Shutdown for Outage this weekend

Cell 3 AS/SVE System Data Log

Date: 5-17-17 **Time:** _____

Temp: 72°

SVE Process Vacuum:	38.7	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	9.2	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.4	SCFM		
Sparge Temp:	84.8	°F	**Air Sample Collected:**	No
Control Room Temp:	55	°F	**SVE Run Time:**	960
XP Room Temp:	59	°F	**Sparge Run Time:**	960

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-17-17 **Time:** _____

Temp: 59° SUNNY.

SVE Process Vacuum:	40.3	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.6	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	74.4	°F	**Air Sample Collected:**	No
Control Room Temp:	50	°F	**SVE Run Time:**	936
XP Room Temp:	54	°F	**Sparge Run Time:**	936

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-16-17 **Time:** _____

Temp: 53°

SVE Process Vacuum:	20.7	in WC	**System Status: (Arrival)**	OFF
Sparge PSI:	8.5	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	39.4	SCFM		
Sparge Temp:	69.5	°F	**Air Sample Collected:**	NO
Control Room Temp:	50	°F	**SVE Run Time:**	913
XP Room Temp:	56	°F	**Sparge Run Time:**	913

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-15-17 **Time:** _____

Temp: 53° Sunny.

SVE Process Vacuum:	43.2	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.2	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	66.3	°F	**Air Sample Collected:**	No
Control Room Temp:	45	°F	**SVE Run Time:**	889
XP Room Temp:	51	°F	**Sparge Run Time:**	889
			After Cooler	889

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-12-17 **Time:** _____

Temp: 53° cloudy.

SVE Process Vacuum:	33.5	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.2	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	63.2	°F	**Air Sample Collected:**	No
Control Room Temp:	46	°F	**SVE Run Time:**	816
XP Room Temp:	49	°F	**Sparge Run Time:**	816.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-11-17 **Time:** 1330

Temp: 56° rain

SVE Process Vacuum:	35.9	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.2	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	62.9	°F	**Air Sample Collected:**	NO
Control Room Temp:	45	°F	**SVE Run Time:**	89
XP Room Temp:	48	°F	**Sparge Run Time:**	801

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-10-17 **Time:** _____

Temp: 48°

SVE Process Vacuum: 39.5 in WC

Sparge PSI: 8.0 PSI

SVE Process Flow: 1.5 SCFM

Sparge Temp: 64.0 °F

Control Room Temp: 45 °F

XP Room Temp: 49 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

SVE Run Time: 794

Sparge Run Time: 794

After cooler run time 794

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-9-17 **Time:** 1420

Temp: 43°

SVE Process Vacuum: 37.5 in WC

Sparge PSI: 9.1 PSI

SVE Process Flow: 1.4 SCFM

Sparge Temp: 80.0 °F

Control Room Temp: 53 °F

XP Room Temp: 59 °F

System Status: (Arrival) OFF NO ELECTRIC

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 778

Sparge Run Time: 778

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-8-17 **Time:** _____

Temp: 45°

SVE Process Vacuum: 37.3 in WC

Sparge PSI: 7.6 PSI

SVE Process Flow: 1.5 SCFM

Sparge Temp: 58.6 °F

Control Room Temp: 41 °F

XP Room Temp: 46 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

SVE Run Time: 765

Sparge Run Time: 765

After Cooler 765

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-5-17 **Time:** _____

Temp: 60°

SVE Process Vacuum: 0.6 in WC

Sparge PSI: 0.0 PSI

SVE Process Flow: 0.1 SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF
(Arrival) No power

System Status: OFF
(Departure)

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

00/2hrs. No power

Cell 3 AS/SVE System Data Log

Date: 5-4-17 **Time:** _____

Temp: 56°

SVE Process Vacuum:	38.5 in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.0 PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5 SCFM		
Sparge Temp:	66.3 °F	**Air Sample Collected:**	No
Control Room Temp:	47 °F	**SVE Run Time:**	678
XP Room Temp:	51 °F	**Sparge Run Time:**	678

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-3-17 **Time:** _____

Temp: 60°

SVE Process Vacuum:	41.7	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.3	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	73.7	°F	**Air Sample Collected:**	NO
Control Room Temp:	48	°F	**SVE Run Time:**	654
XP Room Temp:	52	°F	**Sparge Run Time:**	653

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-2-17 **Time:** _____

Temp: 69°

SVE Process Vacuum:	44.0	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	9.0	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	79.6	°F	**Air Sample Collected:**	NO
Control Room Temp:	53	°F	**SVE Run Time:**	629
XP Room Temp:	56	°F	**Sparge Run Time:**	629
			After Cooler	629

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 5-1-17 **Time:** _____

Temp: 80°

SVE Process Vacuum: 40.0 in WC

Sparge PSI: 9.6 PSI

SVE Process Flow: 1.4 SCFM

Sparge Temp: 88.7 °F

Control Room Temp: 57 °F

XP Room Temp: 62 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 611

Sparge Run Time: 611

After cooler 611

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 5-31-17 **Time:** 0830

Temp: 63° Fog.

Total Discharge: 11663630 Gal

Daily Discharge: 24,940 Gal

AST Pressure: 57.4 in WC

Dual Phase Vacuum: 18.8 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 79 °F

AST water PH 9.47 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 30 #

Surge Counter: 25177

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 778 Outlet Pump 892 Booster Blower 1468

AST Blower 1467 MS Pump 588 Aeration Blower —

AST Pump 431 Dual Phase 1207

Maintenance Work Performed, Adjustments Made and Comments:

Acid pump set to 50 > was at 45 5/31/17

Cell 5 GW Pump and Treat System Data Log

Date: 5-30-17 **Time:** 1120

Temp: 57° cloudy.

Total Discharge: 11638690 Gal ÷4

Daily Discharge: 18,243.5 Gal

AST Pressure: 57.7 in WC

Dual Phase Vacuum: 18.9 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 75 °F

AST water PH 9.74 pH(7.0-9.0)

Inf Bag Filter DP: 0|0 PSI

Eff Bag Filter DP: 0|0 PSI

Remaining Bag Filters: 30. #

Mag Gauge Flow: 2.0 (1.50-2.00)

System Status: OFF (Arrival)

System Status: on (Departure)

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 20 #

Surge Counter: 25177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 765

Outlet Pump 879

Booster Blower 1451

AST Blower 1450

MS Pump 576

Aeration Blower —

AST Pump 421

Dual Phase 1190

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 5-26-17 **Time:** 1505

Temp: 71

Total Discharge:	1156571/6	Gal	**Mag Gauge Flow:**	1.55 (1.50-2.00)
Daily Discharge:		Gal	**System Status:** (Arrival)	On
AST Pressure:	55.6	in WC	**System Status:** (Departure)	On
Dual Phase Vacuum:	18.6	in ~~WC~~ HG	**Sample Collected:**	Y
Dual Phase Temp:	103	°F	**Bag Filters Replaced:**	N
XP Room Temp:	83	°F	**Cartridge Filters Replaced:**	N
AST water PH	9.40	pH(7.0-9.0)	**Remianing Cartridge**	— #
Inf Bag Filter DP:	0/0	PSI	**Surge Counter:**	25177
Eff Bag Filter DP:	0/0	PSI	**Remaining Defoamer:**	9 Gallons
Remaining Bag Filters:		#		

Run Times

Inlet Pump	725	Outlet Pump	840	Booster Blower	1356
AST Blower	1355	MS Pump	537	Aeration Blower	0
AST Pump	390	Dual Phase	1135		

Maintenance Work Performed, Adjustments Made and Comments:

- Added Acid to drum
- Will Run over long weekend

Cell 5 GW Pump and Treat System Data Log

Date: 5/25/17 **Time:** 1405

Temp: 69

Total Discharge:	11531660	Gal	**Mag Gauge Flow:**	1.75 (1.50-2.00)
Daily Discharge:		Gal	**System Status:** (Arrival)	Off
AST Pressure:	54.9	in WC	**System Status:** (Departure)	On
Dual Phase Vacuum:	18.8	in WC	**Sample Collected:**	Y
Dual Phase Temp:	103	°F	**Bag Filters Replaced:**	Y
XP Room Temp:	81	°F	**Cartridge Filters Replaced:**	Y
AST water PH	~~5.19~~ 8.94	pH(7.0-9.0)	**Remianing Cartridge**	1 box #
Inf Bag Filter DP:	~~0/20~~ 50/20	PSI	**Surge Counter:**	25177
Eff Bag Filter DP:	0/0	PSI	**Remaining Defoamer:**	10 Gallons
Remaining Bag Filters:		#		

Run Times

Inlet Pump	706	Outlet Pump	822	Booster Blower	1331
AST Blower	1330	MS Pump	519	Aeration Blower	0
AST Pump	376	Dual Phase	1109		

Maintenance Work Performed, Adjustments Made and Comments:

Started system back up @ 0930. Changed filters, Added defoamer, * Changed bags today DP shouldn't be high?

Acid Pump set @ 36. Check tomorrow

Cell 5 GW Pump and Treat System Data Log

Date: 5/24/17 **Time:** 1525

Temp: 60

Total Discharge: 11,526,288 Gal *

Daily Discharge: 36,440 Gal

AST Pressure: 56.2 in WC

Dual Phase Vacuum: 18.9 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 80 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge _____ #

Surge Counter: 25177

Remaining Defoamer: 0 Gallons

Run Times

Inlet Pump 701 Outlet Pump 819 Booster Blower 1308

AST Blower 1307 MS Pump 516 Aeration Blower 0

AST Pump 374 Dual Phase 1105

Maintenance Work Performed, Adjustments Made and Comments:

Took Reading @ end of day. Number of Total Gallons treated most likely around the 25,000 - 30,000 range.

Defoamer ran out. System off

Cell 5 GW Pump and Treat System Data Log

Date: 5/23/17 **Time:** 0915

Temp: 62

Total Discharge: 11489848 Gal

Daily Discharge: 29,298 Gal

AST Pressure: 57.1 in WC

Dual Phase Vacuum: 19.3 in WC

Dual Phase Temp: 105 °F

XP Room Temp: 73 °F

AST water PH 9.12 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: Y

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge – #

Surge Counter: 25177

Remaining Defoamer: 5 Gallons

Run Times

Inlet Pump 674 Outlet Pump 801 Booster Blower 1278

AST Blower 1277 MS Pump 497 Aeration Blower 0

AST Pump 359 Dual Phase 1081

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 5/22/17 **Time:** 1105

Temp: 61

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: _____ (Arrival)

System Status: _____ (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

- Oil for Dual Phase arrived today.
- Still working on auto(pH) controller.
- Will start up today.

Cell 5 GW Pump and Treat System Data Log

Date: 5-18-17 **Time:** _____

Temp: 73°

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

w/ parts blower oil filter

Cell 5 GW Pump and Treat System Data Log

Date: 5/19/17 **Time:** 1000

Temp: 81

Total Discharge: 1,460,550 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____

System Status: (1.50-2.00) Off
(Arrival)

System Status: Off
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

Waiting for Vacuum Oil. Delivery should be today.

Cell 5 GW Pump and Treat System Data Log

Date: 5-17-17 **Time:** _____

Temp: 59°

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

w/parts blower oil filter

Cell 5 GW Pump and Treat System Data Log

Date: 5-16-17 **Time:** _____

Temp: 52° Sunny

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

w/ parts - blower oil

(1) move filter

Cell 5 GW Pump and Treat System Data Log

Date: 5-15-17 **Time:** _____

Temp: 53° Sunny.

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

w/ parts ; blower oil
① filter

Cell 5 GW Pump and Treat System Data Log

Date: 5-12-17 **Time:** _____

Temp: 53° cloudy.

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

w/ parts blower oil & (2) filters – received 1 on 5/11/17.

Cell 5 GW Pump and Treat System Data Log

Date: 5-11-17 **Time:** _____

Temp: 56° rain

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 659

Outlet Pump 786

Booster Blower 1260

AST Blower 1259

MS Pump 482

Aeration Blower ~~0~~

AST Pump 347

Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

w/ parts blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 5-9-17 **Time:** _____

Temp: 43°

Total Discharge: 11460543 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 659 Outlet Pump 786 Booster Blower 1260

AST Blower 1259 MS Pump 482 Aeration Blower 0

AST Pump 347 Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

Waiting for blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 5-10-17 **Time:** _____

Temp: 48°

Total Discharge: 11460543 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 659 Outlet Pump 786 Booster Blower 1260

AST Blower 1259 MS Pump 482 Aeration Blower ~~0~~

AST Pump 347 Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

w/parts — blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 5-8-17 **Time:** _____

Temp: 45°

Total Discharge: 11460543 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: 42 °F

XP Room Temp: 56 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 659

Outlet Pump 786

Booster Blower 1260

AST Blower 1259

MS Pump 482

Aeration Blower Ø

AST Pump 347

Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

waiting for blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 5-5-17 **Time:** _____

Temp: 60°

Total Discharge: 11460543 Gal

Daily Discharge: – Gal

AST Pressure: Ø in WC

Dual Phase Vacuum: Ø in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 659 Outlet Pump 786 Booster Blower 1260

AST Blower 1259 MS Pump 482 Aeration Blower Ø

AST Pump 347 Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

waiting for blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 5-4-17 **Time:** _____

Temp: 56

Total Discharge: 11460543 Gal

Daily Discharge: _____ Gal

AST Pressure: – in WC

Dual Phase Vacuum: 0 in WC

Dual Phase Temp: 0 °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 659 Outlet Pump 786 Booster Blower 1260

AST Blower 1259 MS Pump 482 Aeration Blower 0

AST Pump 347 Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

waiting for blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 5-3-17 **Time:** _____

Temp: 60°

Total Discharge: 11460543 Gal

Daily Discharge: — Gal

AST Pressure: 0 in WC

Dual Phase Vacuum: 0 in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 659 Outlet Pump 786 Booster Blower 1260

AST Blower 1259 MS Pump 482 Aeration Blower 0

AST Pump 347 Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

waiting for blower oil.

Cell 5 GW Pump and Treat System Data Log

Date: 5-2-17 **Time:** _____

Temp: 69°

Total Discharge: 11460543 Gal

Daily Discharge: — Gal

AST Pressure: Ø in WC

Dual Phase Vacuum: Ø in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 659

Outlet Pump 786

Booster Blower 1260

AST Blower 1259

MS Pump 482

Aeration Blower Ø

AST Pump 347

Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

waiting for blower oil

Cell 5 GW Pump and Treat System Data Log

Date: 5-1-17 **Time:** _____

Temp: 80°

Total Discharge: 11460543 Gal

Daily Discharge: — Gal

AST Pressure: 0 in WC

Dual Phase Vacuum: 0 in WC

Dual Phase Temp: 53° °F

XP Room Temp: 76 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 0/0 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 16 #

Mag Gauge Flow: — (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 25 #

Surge Counter: 25,176

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 659 Outlet Pump 786 Booster Blower 1260

AST Blower 1259 MS Pump 482 Aeration Blower —

AST Pump 347 Dual Phase 1063

Maintenance Work Performed, Adjustments Made and Comments:

waiting for blower oil

8.10
- 7.45
0.65

CELL 6 DATA LOG

Date: 5/26/17

Time: 1515

Outside Temp: 71

Weather Conditions: Sunny

System Status: On

Generator Status: On

Generator Hours: _____

Vacuum IN Hg: _____

DPT 101: 0.30

DPT 102: 0.75

Blower Temperature: 225

Blower Outlet PSI: 0

Discharge Water Total: _____

# of Active Wells: 17

Cartridge Filters Changed: N

Generator Fuel Level: Full

Carroll Fuel Tank Level: Full

Product Drum Level: 26 Gallon

Product Tank Measurement: 0.65 ft
(Weekly)

Arrival: T1: _____ T2: _____ T3: _____

Departure: T1: _____ T2: _____ T3: _____

Additional Notes/ Maintenance Performed

- Turned off @ end of day, will start up 5/30

CELL 6 DATA LOG

Date: 5/25/17

Time: 1415

Outside Temp: 69

Weather Conditions: Cloudy

System Status: On

Discharge Water Total: 179288

Generator Status: On

# of Active Wells: 17

Generator Hours: _____

Cartridge Filters Changed: Y

Vacuum IN Hg: 14.0

Generator Fuel Level: _____

DPT 101: _____

Carroll Fuel Tank Level: _____

DPT 102: _____

Product Drum Level: 30 G

Blower Temperature: _____

Product Tank Measurement: 0.5' product.
(Weekly)

Blower Outlet PSI: _____

VCV Not online

Arrival: T1: _____ T2: _____ T3: _____

Departure: T1: _____ T2: _____ T3: _____

Additional Notes/ Maintenance Performed

No longer using oxidizer + VCV.

filling products in tanks is main concern.

3+3+2+4+2+1+1+1

CELL 6 DATA LOG

Date: 5/24/17

Time: 1525

Outside Temp: 60

Weather Conditions: Cloudy

System Status: Off

Generator Status: Off

Generator Hours: _____

Vacuum IN Hg: _____

DPT 101: _____

DPT 102: _____

Blower Temperature: _____

Blower Outlet PSI: _____

Discharge Water Total: _____

# of Active Wells: _____

Cartridge Filters Changed: _____

Generator Fuel Level: _____

Carroll Fuel Tank Level: _____

Product Drum Level: _____

Product Tank Measurement: _____
(Weekly)

Arrival:	T1: _____	T2: _____	T3: _____
Departure:	T1: _____	T2: _____	T3: _____

Additional Notes/ Maintenance Performed

Changed cartridge filters. Will turn on tommorow w/ Josh.

CELL 6 DATA LOG

Date: 5/23/17 **Time:** 1000

Outside Temp: 61 **Weather Conditions:** Sunny

System Status: On **Discharge Water Total:** _____

Generator Status: On **# of Active Wells:** _____

Generator Hours: _____ **Cartridge Filters Changed:** _____

Vacuum IN Hg: _____ **Generator Fuel Level:** _____

DPT 101: _____ **Carroll Fuel Tank Level:** _____

DPT 102: _____ **Product Drum Level:** _____

Blower Temperature: _____ **Product Tank Measurement:** _____
(Weekly)

Blower Outlet PSI: _____

Arrival:	**T1:** _____	**T2:** _____	**T3:** _____
Departure:	**T1:** _____	**T2:** _____	**T3:** _____

Additional Notes/ Maintenance Performed

Began pumping operations on the East side of the well field. We have bypassed the oxidizer. Pulling liquid. Not as concerned w/ vapors. Less wells online. Will get specifics tommorow.

CELL 6 DATA LOG

Date: 5/22/17

Time: 1105

Outside Temp: 61°

Weather Conditions: Rainy

System Status: On

Discharge Water Total: 174076

Generator Status: On

# of Active Wells: 1

Generator Hours: 1512

Cartridge Filters Changed: N

Vacuum IN Hg: 13.1

Generator Fuel Level: full

DPT 101: 0.08

Carroll Fuel Tank Level:

DPT 102: 1.05

Product Drum Level: 32 Gals

Blower Temperature: 200

Product Tank Measurement: (Weekly)

Blower Outlet PSI: 0

Arrival: T1: Off T2: T3:

Departure: T1: Off T2: T3:

Additional Notes/ Maintenance Performed

- Sucking out Main Product tank using 1 vacuum line.
- Tank is mostly water.

CELL 6 DATA LOG

Date: 5/19/17 **Time:** 1010

Outside Temp: 81 **Weather Conditions:** Hot

System Status: _____ **Discharge Water Total:** _____

Generator Status: _____ **# of Active Wells:** _____

Generator Hours: _____ **Cartridge Filters Changed:** _____

Vacuum IN Hg: _____ **Generator Fuel Level:** _____

DPT 101: _____ **Carroll Fuel Tank Level:** _____

DPT 102: _____ **Product Drum Level:** _____

Blower Temperature: _____ **Product Tank Measurement:** _____
(Weekly)

Blower Outlet PSI: _____

Arrival: **T1:** _____ **T2:** _____ **T3:** _____

Departure: **T1:** _____ **T2:** _____ **T3:** _____

Additional Notes/ Maintenance Performed

Power is Off. Will turn on Monday when Josh is back.

CELL 6 DATA LOG

Date: 5/9/17 **Time:** 0830

Outside Temp: 50 °F **Weather Conditions:** Sunny

System Status: On **Discharge Water Total:** 162518

Generator Status: On **# of Active Wells:** 21

Generator Hours: 1421 **Cartridge Filters Changed:** N

Vacuum IN Hg: 10.7 **Generator Fuel Level:** 1/4 Full Main

DPT, 101: 1.00 **Carroll Fuel Tank Level:** 1/2 Tank

DPT 102: 1.00 **Product Drum Level:** 19 Gals

Blower Temperature: 180 **Product Tank Measurement:** _____
(Weekly)

Blower Outlet PSI: 37 in H_2O

Arrival: T1: 390 T2: 384 T3: 392

Departure: T1: ~~443~~ 361 T2: 450 T3: ~~361~~ 443

Additional Notes/ Maintenance Performed

CELL 6 DATA LOG

Date: 5/10/17 **Time:** 0830

Outside Temp: 55 **Weather Conditions:** Sunny

System Status: On **Discharge Water Total:** 166244

Generator Status: On **# of Active Wells:** ~~44~~ 23

Generator Hours: 1445 **Cartridge Filters Changed:** Yes

Vacuum IN Hg: 10.6 **Generator Fuel Level:** Main Full

DPT 101: 1.20 **Carroll Fuel Tank Level:** < 1/4 Full

DPT 102: 1.0 **Product Drum Level:** 28 Gals

Blower Temperature: 180 **Product Tank Measurement:** _____
(Weekly)

Blower Outlet PSI: 37

Arrival: **T1:** ~~424~~ 350 **T2:** 423 **T3:** 424

Departure: **T1:** _____ **T2:** _____ **T3:** _____

Additional Notes/ Maintenance Performed

CELL 6 DATA LOG

Date: 5/11/17

Time: 0830

Outside Temp: 54°

Weather Conditions: Rainy

System Status: On

Discharge Water Total: 170594

Generator Status: On

# of Active Wells: 23

Generator Hours: 1470

Cartridge Filters Changed: N

Vacuum IN Hg: 11.5

Generator Fuel Level: Full

DPT 101: 1.10

Carroll Fuel Tank Level: Full

DPT 102: 0.90

Product Drum Level: 22 Gals

Blower Temperature: 200

Product Tank Measurement: _____
(Weekly)

Blower Outlet PSI: 34

Arrival: T1: 350 T2: 409 T3: 413

Departure: T1: _____ T2: _____ T3: _____

Additional Notes/ Maintenance Performed

CELL 6 DATA LOG

Date: 5/12/17

Time: 0900

Outside Temp: 53°

Weather Conditions: Sunny

System Status: On

Generator Status: On

Generator Hours: 1493

Vacuum IN Hg: 11.4

DPT 101: 0.9

DPT 102: 0.75

Blower Temperature: 180

Blower Outlet PSI: 26

Discharge Water Total: 172807

# of Active Wells: 22

Cartridge Filters Changed: Yes

Generator Fuel Level: 3/4 Main Full

Carroll Fuel Tank Level: Full

Product Drum Level: 30 Gallons

Product Tank Measurement: 1,589
(Weekly)
34" tank

Arrival:	**T1:** 339	**T2:** 372	**T3:** 401
Departure:	**T1:** 350	**T2:** 445	**T3:** 438

Additional Notes/ Maintenance Performed

Adjustments or Changes Made

DATE/TIME:

DATE/TIME:

DATE/TIME:

DATE/TIME:

DATE/TIME:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-30-17 **Time:** 0730 **Temp:** 76°

SVE Process Vacuum: 50.1 in WC

Sparge PSI: 13.2 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 93 °F

Sparge Room Temp: 90 °F

XP Room Temp: 91 °F

Sparge Run Time: 1765

SVE Run Time: 1765

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 180°

PID at TI 101: 42.0 ppm

PID at MID Carbon: 39.9 ppm

PID at EFF Carbon: 43.6 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	5	13	9	4	19	11	4
2	9	5	8	11	4	14	10	4	20	9	4
3	11	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	5	22	OFF	
5	3	6	11	11	4	17	19	4	23	9	4
6	12	5	12	10	3	18	10	5	24	7	5
									25	OFF	

Total cfm: 189

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-29-17 **Time:** 0910 **Temp:** 72°

SVE Process Vacuum: 50.2 in WC

Sparge PSI: 12.0 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 96 °F

Sparge Room Temp: 89 °F

XP Room Temp: 89 °F

Sparge Run Time: 1752

SVE Run Time: 1752

(Arrival) **System Status:** On

(Departure) **System Status:** On

Air Sample Collected: N

Temp at TI 101: 170°

PID at TI 101: ~~21~~ 27.8 ppm

PID at MID Carbon: 21.0 ppm

PID at EFF Carbon: 9.8 ppm

Surge Counter:

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	6	4	13	9	4	19	10	3
2	10	5	8	11	3	14	10	4	20	8	3
3	10	3	9	5	4	15	0	4	21	11	4
4	0	5	10	7	5	16	6	4	22	0	0
5	0	5	11	12	3	17	18	3	23	8	4
6	12	4	12	10	3	18	9	4	24	7	4
									25	0	4

Total cfm:

Maintenance Work Performed, Adjustments Made and Comments:

2nd Eff Carbon barely pushes out any air. Couldn't fill Tefler bag. Everything else was normal.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-28-17 **Time:** _____ **Temp:** 61°

SVE Process Vacuum: 52.3 in WC

Sparge PSI: 12.7 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 85 °F

Sparge Room Temp: 88 °F

XP Room Temp: 84 °F

Sparge Run Time: 1726

SVE Run Time: 1726

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 170°

PID at TI 101: 41.5 ppm

PID at MID Carbon: 38.0 ppm

PID at EFF Carbon: 47.8 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	10	4	19	11	3
2	9	5	8	10	4	14	10	4	20	9	4
3	10	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	7	4	22	OFF	
5	3	5	11	12	3	17	18	4	23	9	4
6	12	4	12	10	3	18	10	4	24	8	4
									25	OFF	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-27-17 **Time:** 0755 **Temp:** 68°

SVE Process Vacuum: 51.5 in WC

Sparge PSI: 11.9 PSI

SVE Process Flow: 2.7 SCFM

Sparge Temp: 90. °F

Sparge Room Temp: 89 °F

XP Room Temp: 85 °F

Sparge Run Time: 1702

SVE Run Time: 1702

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 174°

PID at TI 101: 41.5 ppm

PID at MID Carbon: 38.3 ppm

PID at EFF Carbon: 48.2 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	10	4	19	11	3
2	10	5	8	11	4	14	11	4	20	9	4
3	11	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	7	4	22	OFF	
5	3	5	11	12	3	17	18	4	23	9	4
6	12	4	12	10	3	18	10	4	24	8	4
									25	OFF	

Total cfm: 194

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-26-17 **Time:** 0855 **Temp:** 66°

SVE Process Vacuum: 50.7 in WC

Sparge PSI: 13.1 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 86 °F

Sparge Room Temp: 81 °F

XP Room Temp: 78 °F

Sparge Run Time: 1680

SVE Run Time: 1680

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 160°

PID at TI 101: 5.6 ppm

PID at MID Carbon: 6.2 ppm

PID at EFF Carbon: 12.4 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	5	13	9	5	19	12	4
2	6	5	8	10	5	14	11	5	20	10	4
3	11	5	9	4	5	15	3	5	21	12	5
4	2	6	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	20	4	23	10	4
6	12	5	12	11	3	18	11	5	24	7	5
									25	OFF	

Total cfm: 190

Maintenance Work Performed, Adjustments Made and Comments:

reset the SVE blower - had a partial voltage loss - restarted the sparge blower.

Cell 1 AS/SVE System Data Log

Date: 6-23-17 **Time:** _____

Temp: 77° Overcast.

Oxidizer Main Temp:	—	°F	(Arrival) **System Status:**	ON
Oxidizer High Temp:	—	°F	(Departure) **System Status:**	ON
Element High Temp:	—	°F	**Air Sample Collected:**	NO
SVE Process Vacuum:	49.0	in WC	**Sparge Run Time:**	1651
Sparge PSI:	11.8	PSI	**SVE Run Time:**	1651
SVE Process Flow:	2.8	SCFM	**Temp at TI 101**	168°
Sparge Temp:	97	°F	**PID at TI 101:**	12.6 ppm
Sparge Room Temp:	91	°F	**PID at MID Carbon:**	13.0 ppm
XP Room Temp:	83	°F	**PID at EFF Carbon :**	20.7 ppm
			Surge Counter:	NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	9	4	19	11	4
2	9	5	8	11	4	14	11	4	20	8	4
3	11	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	18	4	23	9	4
6	12	5	12	10	3	18	10	4	24	7	5
									25	OFF	

Total cfm: 187

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 6-22-17 **Time:** 1110

Temp: 78°

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 47.7 in WC

Sparge PSI: 12.9 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 98 °F

Sparge Room Temp: 92 °F

XP Room Temp: 85 °F

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Sparge Run Time: 1630

SVE Run Time: 1630

Temp at TI 101 170°

PID at TI 101: 37.5 ppm

PID at MID Carbon: 51.2 ppm

PID at EFF Carbon : 49.1 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	4	19	11	3
2	10	2	8	11	4	14	11	4	20	8	4
3	11	4	9	5	4	15	3	4	21	11	4
4	2	5	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	3	17	18	4	23	9	4
6	12	5	12	10	3	18	10	4	24	7	5
									25	OFF	

Total cfm: 186

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 6-21-17 **Time:** 0830

Temp: 72° Sunny.

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 50.3 in WC

Sparge PSI: 11.8 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 94 °F

Sparge Room Temp: 89 °F

XP Room Temp: 81 °F

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: NO

Sparge Run Time: 1604

SVE Run Time: 1604

Temp at TI 101 164

PID at TI 101: 28.4 ppm

PID at MID Carbon: 18.7 ppm

PID at EFF Carbon : 27.9 ppm

Surge Counter: N/A

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	9	4	19	11	3
2	9	5	8	11	4	14	11	4	20	8	4
3	11	4	9	6	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	18	4	23	9	4
6	12	5	12	10	3	18	10	4	24	7	5
									25	OFF	

Total cfm: 188

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 6-20-17 **Time:** 0950

Temp: 71° Sunny.

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 50.8 in WC

Sparge PSI: 12.5 PSI

SVE Process Flow: 2.7 SCFM

Sparge Temp: 94 °F

Sparge Room Temp: 92 °F

XP Room Temp: 85 °F

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Sparge Run Time: 1580

SVE Run Time: 1580

Temp at TI 101 170°

PID at TI 101: 24.5 ppm

PID at MID Carbon: 25.4 ppm

PID at EFF Carbon : 34.2 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	9	4	19	11	3.5
2	9	5	8	11	4	14	11	4	20	8	4
3	11	4	9	5	4	15	2	4	21	11	4
4	3	5	10	6.5	5	16	6	5	22	OFF	
5	2	5	11	11	3	17	18	4	23	9	4
6	12	4	12	2.5	2.5	18	10	4	24	7	4
									25	OFF	

Total cfm: 190

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 6-19-17 **Time:** 0830

Temp: 80° SUNNY

Oxidizer Main Temp: / °F

Oxidizer High Temp: / °F

Element High Temp: / °F

SVE Process Vacuum: 48.7 in WC

Sparge PSI: 12.7 PSI

SVE Process Flow: 2.7 SCFM

Sparge Temp: 99 °F

Sparge Room Temp: 90 °F

XP Room Temp: 82 °F

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: YES

Sparge Run Time: 1556

SVE Run Time: 1556

Temp at TI 101 160°

PID at TI 101: 18.7 ppm

PID at MID Carbon: 17.4 ppm

PID at EFF Carbon : 24.1 ppm

Surge Counter: N/A.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	5	13	10	4	19	10	3
2	10	5	8	11	4	14	11	4	20	8	4
3	10	3	9	6	5	15	2	4	21	11	4
4	3	5	10	8	5	16	7	5	22	OFF	
5	3	5	11	11	3	17	15	4	23	9	4
6	11	5	12	15	3	18	10	4	24	7	4
									25	OFF	

Total cfm: 191

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 6-16-17 **Time:** 1020

Temp: 69° cloudy

Oxidizer Main Temp: ✓ °F

Oxidizer High Temp: ✓ °F

Element High Temp: ✓ °F

SVE Process Vacuum: 50.2 in WC

Sparge PSI: 13.3 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 92° °F

Sparge Room Temp: 82° °F

XP Room Temp: 78° °F

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: yes

Sparge Run Time: 1487

SVE Run Time: 1487

Temp at TI 101 160°

PID at TI 101: 9.3 ppm

PID at MID Carbon: 17.0 ppm

PID at EFF Carbon : 19.8 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	5	13	10	4	19	11	4
2	6	8	8	11	4	14	11	4	20	10	5
3	10	4	9	6	5	15	2	5	21	12	5
4	3	6	10	8	5	16	7	5	22	OFF	
5	2	5	11	9	3	17	10	3	23	10	5
6	11	5	12	10	3	18	11	5	24	8	5
									25	OFF	

Total cfm: 183

Maintenance Work Performed, Adjustments Made and Comments:

BGE Power Outage – came back on 8AM. 6/16/17 BT.

Cell 1 AS/SVE System Data Log

Date: 6-15-17 **Time:** 0830

Temp: 80°

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

(Arrival) **System Status:** Off

(Departure) **System Status:** Off

Air Sample Collected: _____

Sparge Run Time: _____

SVE Run Time: _____

Temp at TI 101 _____

PID at TI 101: _____ ppm

PID at MID Carbon: _____ ppm

PID at EFF Carbon : _____ ppm

Surge Counter: _____

cfm	*psi*	*cfm*	*psi*	*cfm*	*psi*	*cfm*	*psi*
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Power Out!

Cell 1 AS/SVE System Data Log

Date: 6-14-17 **Time:** 0815

Temp: 80°

~~Oxidizer Main Temp:~~ X °F

~~Oxidizer High Temp:~~ X °F

~~Element High Temp:~~ X °F

SVE Process Vacuum: 47 in WC

Sparge PSI: 12.5 PSI

SVE Process Flow: 2.8 in WC ~~SCFM~~

Sparge Temp: 100 °F

Sparge Room Temp: 92 °F

XP Room Temp: 87 °F

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: No

Sparge Run Time: 1466

SVE Run Time: 1466

Temp at TI 101 166°

PID at TI 101: ppm

PID at MID Carbon: ppm

PID at EFF Carbon : ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	5	13	10	4	19	11	3
2	10	5	8	11	4	14	1	4	20	10	4
3	10	4	9	6	4	15	1	5	21	12	4
4	3	6	10	9	5	16	7	5	22	OFF	
5	2	6	11	9	3	17	9	3	23	10	4
6	11	5	12	10	3	18	10	4	24	8	5
									25	OFF	

Total cfm: 191

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 6-13-17 **Time:** _____

Temp: 86°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 45.5 in WC

Sparge PSI: 11.8 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 109 °F

Sparge Room Temp: 101 °F

XP Room Temp: 93 °F

(Arrival)
System Status: ON

(Departure)
System Status: ON

Air Sample Collected: No

Sparge Run Time: 1442

SVE Run Time: 1442

Temp at TI 101 180°

PID at TI 101: _____ ppm

PID MID Carbon: _____ ppm

PID at EFF Carbon : _____ ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	4	5	13	10	4	19	11	4
2	10	5	8	11	4	14	11	4	20	10	5
3	13	5	9	6	5	15	2	5	21	12	5
4	3	6	10	7	5	16	8	5	22	OFF	
5	2	5	11	9	4	17	10	3	23	11	5
6	11	5	12	10	3	18	11	5	24	8	5
									25	OFF	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

Date: 6-12-17 Time: 1000

Temp: 73°

Oxidizer Main Temp: — °F System Status: ON (Arrival)

Oxidizer High Temp: — °F

Element High Temp: — °F System Status: ON (Departure)

SVE Process Vacuum: 50.6 in WC

Sparge PSI: 13.1 PSI Air Sample Collected: Yes

SVE Process Flow: 2.9 SCFM

Surge Counter: N/A.

Sparge Temp: 97 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	3	13	5	9	19	4	12
2	6	6	8	5	10	14	5	12	20	5	11
3	5	13	9	5	5	15	5	3	21	5	13
4	6	3	10	5	8	16	5	7	22	OFF	
5	6	3	11	4	9	17	3	11	23	5	12
6	5	11	12	3	11	18	5	12	24	5	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 176°

rdg. at TI 101 port 3.5 ppm.

rdg. at carbon outlet port TI 301 33.8 ppm

rdg. at carbon outlet port TI 302 8.1 ppm

total SCFM 192

SVE run time 1417 hrs.

Sparge run time 1417 hrs.

XP room temp. 95°

Sparge room temp. 99°

Cell 1 AS/SVE System Data Log

Date: 6-9-17 **Time:** _____

Temp: 59° SUNNY.

Oxidizer Main Temp: – °F **System Status: (Arrival)** ON

Oxidizer High Temp: – °F

Element High Temp: – °F **System Status: (Departure)** ON

SVE Process Vacuum: 52.9 In WC

Sparge PSI: 12.2 PSI **Air Sample Collected:** yes

SVE Process Flow: 3.2 SCFM

Surge Counter: NA

Sparge Temp: 84 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	10	19	3	11
2	5	12	8	4	11	14	4	11	20	4	10
3	4	13	9	5	6	15	5	4	21	4	12
4	5	3	10	5	7	16	5	8	22	OFF	
5	5	2	11	3	9	17	3	10	23	4	11
6	4	10	12	3	10	18	4	11	24	5	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 158°

rdg. at TI 101 port 12.5 ppm.

rdg. at carbon outlet port TI 301 28.7 ppm

rdg. at carbon outlet port TI 302 49.2 ppm

total SCFM 193

SVE run time 1346

Sparge run time 1346

XP room temp. 74°

Sparge room temp. 83°

Cell 1 AS/SVE System Data Log

Date: 6-8-17 Time: 0855

Temp: 55°

Oxidizer Main Temp: — °F System Status: ON (Arrival)

Oxidizer High Temp: — °F

Element High Temp: — °F System Status: ON (Departure)

SVE Process Vacuum: 55.7 in WC

Sparge PSI: 12.3 PSI Air Sample Collected: NO

SVE Process Flow: 3.0 SCFM

Surge Counter: NA

Sparge Temp: 76 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	4	3	13	4	10	19	4	11
2	5	9	8	4	11	14	4	11	20	4	10
3	5	12	9	4	6	15	4	2	21	4	12
4	5	3	10	5	7	16	5	7	22	OFF	
5	5	2	11	3	9	17	3.5	10	23	4	11
6	4	11	12	3	10	18	4	10	24	5	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 150°

rdg. at TI 101 port 14.2 ppm.

rdg. at carbon outlet port TI 301 31.3 ppm

rdg. at carbon outlet port TI 302 48.2 ppm.

total SCFM 185.

SVE run time 1322 hrs.

Sparge run time 1322 hrs.

XP room temp. 76°

Sparge room temp. 71°

Cell 1 AS/SVE System Data Log

Date: 6-7-17 Time: 0850

Temp: 57° Rain

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

System Status: ON (Arrival)

System Status: ON (Departure)

SVE Process Vacuum: 54.1 in WC

Sparge PSI: 12.4 PSI

Air Sample Collected: yes

SVE Process Flow: 2.9 SCFM

Surge Counter: NA.

Sparge Temp: 76 °F

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	10	19	4	11
2	5	9	8	4	11	14	4	11	20	4	10
3	5	13	9	4	6	15	4	3	21	5	12
4	5	3	10	5	7	16	5	7	22	OFF.	
5	5	2	11	4	11	17	3	10	23	4	11
6	5	11	12	3	10	18	5	11	24	5	8
									25	OFF.	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 136°

rdg. at TI 101 port 25.1 ppm

rdg. at carbon outlet port TI 301 31.2 ppm

rdg. at carbon outlet port TI 302 11.4

total SCFM 191.

SVE run time 1299 hrs

Sparge run time 1299. hrs.

XP room temp. 63°

Sparge room temp. 67°

Cell 1 AS/SVE System Data Log

Date: 6-6-17 Time: _____

Temp: 66° SUNNY

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 50.5 in WC

Sparge PSI: 12.2 PSI

SVE Process Flow: 3.1 SCFM

Sparge Temp: 86 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Surge Counter: N/A

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	4	4	13	4	10	19	4	11
2	5	9	8	4	10	14	4	11	20	5	10
3	5	13	9	5	6	15	5	2	21	5	12
4	5	3	10	5	7	16	5	6	22	OFF	
5	5	3	11	4	9	17	3	10	23	5	10
6	5	10	12	3	10	18	5	10	24	5	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 168°

rdg. at TI 101 port 28.6 ppm.

rdg. at carbon outlet port TI 301 55.6 ppm

rdg. at carbon outlet port TI 302 22.5 ppm

total SCFM 190

SVE run time 1275 hrs

Sparge run time 1275 hrs.

XP room temp. 82°

Sparge room temp. 83°

Cell 1 AS/SVE System Data Log

Date: 6-5-17 Time: _____

Temp: 71° Rain

Oxidizer Main Temp: – °F System Status: OFF (Arrival)

Oxidizer High Temp: – °F

Element High Temp: – °F System Status: ON (Departure)

SVE Process Vacuum: 49.7 in WC

Sparge PSI: 11.9 PSI Air Sample Collected: NO

SVE Process Flow: 2.8 SCFM

Surge Counter: NA

Sparge Temp: _____ °F

PSI	SCFM	PSI	SCFM	PSI	SCFM	PSI	SCFM
1	OFF	7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	OFF
5		11		17		23	
6		12		18		24	
						25	OFF

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe _____

rdg. at TI 101 port _____

rdg. at carbon outlet port TI 301 _____

rdg. at carbon outlet port TI 302 _____

total SCFM _____

SVE run time 1258

Sparge run time 1258

XP room temp. _____

Sparge room temp. _____

Cell 1 AS/SVE System Data Log

Date: 6-2-17 Time: 0855

Temp: 58° SUNNY

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 52.8 in WC

Sparge PSI: 12.5 PSI

SVE Process Flow: 3.1 SCFM

Sparge Temp: °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Surge Counter: NA

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	5	4	13	4	10	19	4	11
2	5	9	8	4	11	14	4	11	20	4	10
3	5	13	9	4	6	15	4	3	21	5	12
4	5	3	10	5	7	16	5	7	22	OFF	
5	5	2	11	4	11	17	3	10	23	4	11
6	5	11	12	3	10	18	5	11	24	5	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 162°

rdg. at TI 101 port 18.7 ppm

rdg. at carbon outlet port TI 301 35.2 ppm.

rdg. at carbon outlet port TI 302 38.4 ppm.

total SCFM 191

SVE run time 1245 hrs.

Sparge run time 1245 hrs.

XP room temp. 78°

Sparge room temp. 83°

Cell 1 AS/SVE System Data Log

Date: 6-1-17 Time: 0830

Temp: 61° Sun

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 53.2 in WC

Sparge PSI: 12.2 PSI

SVE Process Flow: 3.1 SCFM

Sparge Temp: — °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Surge Counter: NA

	PSI	SCFM		PSI	SCFM		PSI	SCFM		PSI	SCFM
1	OFF		7	4	3	13	4	10	19	4	11
2	5	9	8	4	11	14	4	11	20	4	10
3	5	12	9	4	6	15	4	2	21	4	12
4	5	3	10	5	7	16	5	7	22	OFF	
5	5	2	11	3	9	17	3.5	10	23	4	11
6	4	11	12	3	10	18	4	10	24	5	8
									25	OFF	

Maintenance Work Performed, Adjustments Made and Comments:

temp. at TI 101 pipe 152°

rdg. at TI 101 port 16.9 ppm.

rdg. at carbon outlet port TI 301 19.9 ppm.

rdg. at carbon outlet port TI 302 27.1 ppm.

total SCFM 185.

SVE run time 1203 hrs.

Sparge run time 1203 hrs.

XP room temp. 69°

Sparge room temp. 79°

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-30-17 **Time:** _____ **Temp:** 76°

SVE Process Vacuum: 21.7 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 91 °F

Sparge Room Temp: 94 °F

XP Room Temp: 92 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 501

SVE Run Time: 1874

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : Ø

Last Stage : Ø

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-29-17 **Time:** 0920 **Temp:** 72°

SVE Process Vacuum: 22.0 in WC

SVE Process Flow: 0.6 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 92 °F

Sparge Room Temp: 90 °F

XP Room Temp: 90 °F

System Status: On
(Arrival)

System Status: On
(Departure)

Air Sample Collected: N

Sparge Run Time: 479

SVE Run Time: 1852

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-28-17 **Time:** 0930 **Temp:** 61°

SVE Process Vacuum: 22.9 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 83 °F

Sparge Room Temp: 82 °F

XP Room Temp: 83 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 452

SVE Run Time: 1825

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0.5 ppm
Last stage : 1.0 ppm.

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-27-17 **Time:** 0830 **Temp:** 68°

SVE Process Vacuum: 22.8 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 85 °F

Sparge Room Temp: 89 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 429

SVE Run Time: 1802

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0.5

Last Stage : 1.2 ppm.

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-26-17 **Time:** _____ **Temp:** 66°

SVE Process Vacuum: 22.5 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 85 °F

Sparge Room Temp: 84 °F

XP Room Temp: 83 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 405

SVE Run Time: 1778

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0.0

LAST STAGE : 0.2

Cell 2 AS/SVE System Data Log

Date: 6-23-17 **Time:** _____

Temp: 77° overcast.

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 22.4 in WC

Sparge PSI: 4.5 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 92 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 332

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID rdg = 0

Last Stage = 0.5 ppm.

Cell 2 AS/SVE System Data Log

Date: 6-22-17 **Time:** 1120

Temp: 78°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 22.3 in WC

Sparge PSI: 4.4 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 96 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 310

Surge Counter: 322

SVE run time 1683

Maintenance Work Performed, Adjustments Made and Comments:

PID rdg. Ø ppm.

Last Stage. 0.7 ppm

Cell 2 AS/SVE System Data Log

Date: 6-21-17 **Time:** _____

Temp: 72° Sunny.

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 22.3 in WC

Sparge PSI: 4.5 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 88 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 284

Surge Counter: 322

SVE Run Time 1657

Maintenance Work Performed, Adjustments Made and Comments:

PID: 0.7 ppm

LAST STAGE: 0

Cell 2 AS/SVE System Data Log

Date: 6-20-17 **Time:** 1200

Temp: 71°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 22.5 in WC

Sparge PSI: 4.5 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 88 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 261

Surge Counter: 322

SVE Runtime 1634

Maintenance Work Performed, Adjustments Made and Comments:

PID 0.8 ppm

LAST Stage ~~0~~

Cell 2 AS/SVE System Data Log

Date: 6-19-17 **Time:** 1000

Temp: 80° SUNNY.

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 21.9 in WC

Sparge PSI: 4.6 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 95 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 237

Surge Counter: 322

SVE runtime 1610

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 6-16-17 **Time:** 1150

Temp: 70° cloudy.

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 21.3 in WC

Sparge PSI: 4.6 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 93 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 169

Surge Counter: 322

SVE run time 1542

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 6-13-17 **Time:** 1015

Temp: 75

Oxidizer Main Temp: \ °F

Oxidizer High Temp: \ °F

Element High Temp: \ °F

SVE Process Vacuum: 20.3 in WC

Sparge PSI: 4.5 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 100 °F

System Status: Off
(Arrival)

System Status: On
(Departure)

Air Sample Collected: N

Sparge Run Time: 149

Surge Counter: 322

SVE : 1522 HRs

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 6-14-17 **Time:** 0840

Temp: 80°

~~**Oxidizer Main Temp:**~~ _____ °F

~~**Oxidizer High Temp:**~~ _____ °F

~~**Element High Temp:**~~ _____ °F

SVE Process Vacuum: 21 in WC

Sparge PSI: 4.4 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 100 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 123

Surge Counter: 319

Maintenance Work Performed, Adjustments Made and Comments:

Sparge Room Temp: 92

XP Room Temp: 87

SVE Run Time: 1497

Cell 2 AS/SVE System Data Log

Date: 6-13-17 **Time:** _____

Temp: 86°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 20.5 in WC

Sparge PSI: 4.4 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 102 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 100

Surge Counter: 319

SVE Run Time 1473

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 6-12-17 **Time:** _____

Temp: 73°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 22.5 in WC

Sparge PSI: 4.5 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 82 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: No

Sparge Run Time: 97

Surge Counter: 319

SVE run time 1445

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 6-9-17 **Time:** _____

Temp: 59° Sunny

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 24.2 in WC

Sparge PSI: 4.7 PSI

SVE Process Flow: 0.7 SCFM

Sparge Temp: 77 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 67

Surge Counter: 313

SVE RUN TIME 1374

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 6-8-17 **Time:** _____

Temp: 55°

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 19.5 in WC

Sparge PSI: 4.9 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 77 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 44

SVE " " 1351

Surge Counter: 313

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 6-7-17 **Time:** _____

Temp: 57° Rain

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 20.2 in WC

Sparge PSI: 4.7 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 74 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 22

SVE " " 1329

Surge Counter: 313

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 6-6-17 **Time:** _____

Temp: 66° Sunny

Oxidizer Main Temp: — °F

Oxidizer High Temp: — °F

Element High Temp: — °F

SVE Process Vacuum: 18.7 in WC

Sparge PSI: 4.5 PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 90 °F

System Status: OFF
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

Sparge Run Time: 1 hr

SVE " " 1308

Surge Counter: 313

Maintenance Work Performed, Adjustments Made and Comments:

replacing the sparge compressor — completed 6/6/17. 10AM.

Cell 2 AS/SVE System Data Log

Date: 6-5-17 **Time:** _____

Temp: 71° Rain

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element High Temp: _____ °F

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

System Status: (Arrival) OFF

System Status: (Departure) OFF (NES) repairs being made

Air Sample Collected: NO

Sparge Run Time: 0

Surge Counter: 316

SVE run time

Maintenance Work Performed, Adjustments Made and Comments:

installing new sparge compressor

Cell 2 AS/SVE System Data Log

Date: 6-2-17 **Time:** _____

Temp: 58° Sunny

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 19.3 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 67 °F

System Status: (Arrival) ON SVE only

System Status: (Departure) ON SVE only

Air Sample Collected: No

Sparge Run Time: Ø

Surge Counter: 316

SVE Run time 1298

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

Date: 6-1-17 **Time:** _____

Temp: 62°

Oxidizer Main Temp: – °F

Oxidizer High Temp: – °F

Element High Temp: – °F

SVE Process Vacuum: 20.1 in WC

Sparge PSI: Ø PSI

SVE Process Flow: 0.6 SCFM

Sparge Temp: 65 °F

System Status: (Arrival) ON SVE only

System Status: (Departure) ON SVE only

Air Sample Collected: NO

Sparge Run Time: Ø

Surge Counter: 316

SVE run time 1274

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 6-30-17 **Time:** 1015 **Temp:** 76°

Total Discharge: 649795 gal

Daily Discharge 13,058 gal

AST Pressure: 60.6 in WC

Oxidizer Main Temp: 632.8 °F

Oxidizer High Temp: 624.3 °F

Element Temp: 835 °F

Inf water PH 8.25 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Defoamer level: 10 gals.

Room Temp: 73.1 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 247 AST Pump 273 MS Pump 6 hrs.

AST Blower 1260 Outlet Pump 547 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 6-29-17 **Time:** 0925 **Temp:** 73°

Total Discharge: 636,737 gal

Daily Discharge 15,453 gal

AST Pressure: 61.1 in WC

Oxidizer Main Temp: 632.8 °F

Oxidizer High Temp: 631.7 °F

Element Temp: 851 °F

Inf water PH 7.6 pH
(7.0-9.0)

Inf Bag Filter DP: 0/05 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 0.65
(0.50-1.0)

System Status: On
(Arrival)

System Status: On
(Departure)

Sample Collected: N

Bag Filters Replaced: N

Defoamer level: ~5 Gallons

Room Temp: 59 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 243 AST Pump 269 MS Pump 6

AST Blower 1238 Outlet Pump 536 GW Pumps _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 6-28-17 **Time:** 0945 **Temp:** 61°

Total Discharge: 621284 gal

Daily Discharge 13,906 gal

AST Pressure: 62.2 in WC

Oxidizer Main Temp: 658.9 °F

Oxidizer High Temp: 642.3 °F

Element Temp: 926 °F

Inf water PH 8.23 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: NO

Defoamer level: 7 gals.

Room Temp: 66.5 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 238 AST Pump 265 MS Pump 6

AST Blower 1212 Outlet Pump 523 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 6-27-17 **Time:** 0900 **Temp:** 68°

Total Discharge: 607378 gal

Daily Discharge 14,051 gal

AST Pressure: 61.4 in WC

Oxidizer Main Temp: 636.6 °F

Oxidizer High Temp: 623.2 °F

Element Temp: 910 °F

Inf water PH 8.03 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 9 gals.

Room Temp: 68° °F

Surge Counter: 249

Run Times (hours)

Inlet pump 234 AST Pump 261 MS Pump 6 hrs.

AST Blower 1188 Outlet Pump 512 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 6-26-17 **Time:** _____ **Temp:** 66°

Total Discharge: 593327 gal 42162 ÷3

Daily Discharge 14,054 gal

AST Pressure: 61.8 in WC

Oxidizer Main Temp: 634.7 °F

Oxidizer High Temp: 630.8 °F

Element Temp: 877 °F

Inf water PH 8.30 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 10 gals.

Room Temp: 75.4 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 229 AST Pump 257 MS Pump 6 hrs.

AST Blower 1164 Outlet Pump 500 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-23-17 **Time:** 1046

Temp: 77° overcast

Total Discharge:	551165	gal	**Mag Gauge Flow:**	.80	(0.50-1.0)
Daily Discharge	12,347	gal	**System Status:** (Arrival)	ON	
AST Pressure:	59.1	in WC			
Oxidizer Main Temp:	636.8	°F	**System Status:** (Departure)	ON	
Oxidizer High Temp:	623.1	°F	**Sample Collected:**	NO	
Element Temp:	883	°F	**Bag Filters Replaced:**	yes	
Room Temp:	74.7	°F	**Cartridge Filters Replaced:**	No	
Inf water PH	8.25	PH			
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge Filters:**	0	
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	12	#	**Defoamer level:**	full	

Run Times (hours)

Inlet pump 216 AST Pump 247 MS Pump 6

AST Blower 1091 Outlet Pump 465 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-22-17 **Time:** 1100

Temp: 78°

Total Discharge: 538818 gal

Daily Discharge 14,599 gal

AST Pressure: 59.5 in WC

Oxidizer Main Temp: 648.7 °F

Oxidizer High Temp: 623.6 °F

Element Temp: 954 °F

Room Temp: 77.3 °F

Inf water PH 8.21 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 16 #

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: ~~0~~

Surge Counter: 249

Defoamer level: 6 gals.

Run Times (hours)

Inlet pump 212 AST Pump 244 MS Pump 6

AST Blower 1069 Outlet Pump 455 GW Pumps # 4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-21-17 **Time:** _____

Temp: 72° Sunny.

Total Discharge: 524219 gal

Daily Discharge 13,903 gal

AST Pressure: 61.0 in WC

Oxidizer Main Temp: 644.5 °F

Oxidizer High Temp: 629.6 °F

Element Temp: 1020/974 °F

Room Temp: 70.2 °F

Inf water PH 7.90 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 16 #

Mag Gauge Flow: .80 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 249

Defoamer level: 7 gals.

Run Times (hours)

Inlet pump 207 AST Pump 240 MS Pump 6

AST Blower 1043 Outlet Pump 443 GW Pumps #4 well on.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-20-17 **Time:** 1040

Temp: 71°

Total Discharge:	510316	gal	**Mag Gauge Flow:**	.95	(0.50-1.0)
Daily Discharge	13,629	gal	**System Status: (Arrival)**	ON	
AST Pressure:	60.7	in WC	**System Status: (Departure)**	ON	
Oxidizer Main Temp:	657.7	°F			
Oxidizer High Temp:	672.3	°F	**Sample Collected:**	No	
Element Temp:	969	°F	**Bag Filters Replaced:**	No	
Room Temp:	70.1	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	8.05	PH	**Remianing Cartridge Filters:**	Ø	
Inf Bag Filter DP:	0/0	PSI			
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	76	#	**Defoamer level:**	8 gals.	

Run Times (hours)

Inlet pump 203 AST Pump 237 MS Pump 6

AST Blower 1020 Outlet Pump 432 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell #2 SVE Process Blower test port .8 ppm
outlet test port Ø

Cell 2 GW Pump and Treat System Data Log

Date: 6-19-17 **Time:** 0915

Temp: 80° Sunny

Total Discharge: 496687 gal 40,176 ÷3

Daily Discharge 13,392 gal

AST Pressure: 58.6 in WC

Oxidizer Main Temp: 660.2 °F

Oxidizer High Temp: 634.5 °F

Element Temp: 842 °F

Room Temp: 77.4 °F

Inf water PH 8.09 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 20 #

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced:

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 249

Defoamer level: 5 gals.

Run Times (hours)

Inlet pump 198 AST Pump 233 MS Pump 6

AST Blower 996 Outlet Pump 420 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

3 barbs

2 valves

Cell 2 GW Pump and Treat System Data Log

Date: 6-16-17 **Time:** 1050

Temp: 70° cloudy.

Total Discharge: 456510 gal

Daily Discharge 13,398 gal

AST Pressure: 59.4 in WC

Oxidizer Main Temp: 638.2 °F

Oxidizer High Temp: 631.7 °F

Element Temp: 995 °F

Room Temp: 72.8 °F

Inf water PH 8.27 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 16 #

Mag Gauge Flow: .85 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: Ø

Surge Counter: 249

Defoamer level: 8 gals.

Run Times (hours)

Inlet pump 185 AST Pump 222 MS Pump 6

AST Blower 927 Outlet Pump 391 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6/15/17 **Time:** 1022

Temp: 75

Total Discharge: 443,112 gal

Daily Discharge 10,916 gal

AST Pressure: 60.2 in WC

Oxidizer Main Temp: 665.1 °F

Oxidizer High Temp: 687.9 °F

Element Temp: 999 °F

Room Temp: 76.0 °F

Inf water PH 7.50 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) Off

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: JW AK Y

Cartridge Filters Replaced: \

Remianing Cartridge Filters: \

Surge Counter: 249

Defoamer level: 8 Gallons

Run Times (hours)

Inlet pump 181 AST Pump 219 MS Pump 6

AST Blower 904 Outlet Pump 381 GW Pumps _____

Maintenance Work Performed, Adjustments Made and Comments:

Power Off @ 0540, Power Restored @ 0900

Restarted @ 1015

Cell 2 GW Pump and Treat System Data Log

Date: 6-14-17 **Time:** 0830

Temp: 80°

Total Discharge: 432,196 gal

Daily Discharge 15,191 gal

AST Pressure: 59.3 in WC

Oxidizer Main Temp: 641 °F

Oxidizer High Temp: 628 °F

Element Temp: 943 °F

Room Temp: 78 °F

Inf water PH — PH

Inf Bag Filter DP: 0/10 - 0/0 PSI

Eff Bag Filter DP: 0/0 - 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: .90 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

~~**Cartridge Filters Replaced:**~~ _____

~~**Remianing Cartridge Filters:**~~ _____

Surge Counter: 249

Defoamer level: Filled

Run Times (hours)

Inlet pump 177 AST Pump 216 MS Pump 6

AST Blower 883 Outlet Pump 373 ~~GW Pumps~~ _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-13-17 **Time:** _____

Temp: 86°

Total Discharge:	423052	gal	**Mag Gauge Flow:**	✓	(0.50-1.0)
Daily Discharge	6047	gal	**System Status:** (Arrival)	OFF.	
AST Pressure:	55.7	in WC			
Oxidizer Main Temp:	634.2	°F	**System Status:** (Departure)	ON	
Oxidizer High Temp:	617.2	°F	**Sample Collected:**	No	
Element Temp:	925	°F	**Bag Filters Replaced:**	NO	
Room Temp:	88.5	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	6.85	PH			
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge Filters:**	Ø	
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	20	#	**Defoamer level:**	4 gals.	

Run Times (hours)

Inlet pump 174 AST Pump 214 MS Pump 6

AST Blower 866 Outlet Pump 366 GW Pumps #4 well being used.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-12-17 **Time:** 1050

Temp: 73°

Total Discharge: 417005 gal 40378 ÷3 **Mag Gauge Flow:** 1.0 (0.50-1.0)

Daily Discharge 13,459 gal **System Status:** ON (Arrival)

AST Pressure: 60.5 in WC

Oxidizer Main Temp: 649.7 °F **System Status:** ON (Departure)

Oxidizer High Temp: 633.0 °F **Sample Collected:** NO

Element Temp: 974 °F **Bag Filters Replaced:** NO

Room Temp: 73.1 °F **Cartridge Filters Replaced:** 0

Inf water PH 7.14 PH **Remianing Cartridge Filters:** 0

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI **Surge Counter:** 249

Remaining Bag Filters: 20 # **Defoamer level:** 5 gals.

Run Times (hours)

Inlet pump 172 AST Pump 212 MS Pump 6

AST Blower 838 Outlet Pump 361 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

#2 cell
SVE
319

Cell 2 GW Pump and Treat System Data Log

Date: 6-9-17 **Time:** _____

Temp: 59° SUNNY

Total Discharge:	376627	gal	**Mag Gauge Flow:**	1.0	(0.50-1.0)
Daily Discharge	13,615	gal	**System Status:** (Arrival)	ON	
AST Pressure:	61.4	in WC			
Oxidizer Main Temp:	661.5	°F	**System Status:** (Departure)	ON	
Oxidizer High Temp:	629.1	°F	**Sample Collected:**	NO	
Element Temp:	807	°F	**Bag Filters Replaced:** 6-6	NO	
Room Temp:	64.0	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	8.16	PH			
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge Filters:**	0	
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	20	#	**Defoamer level:**	10 gals.	

Run Times (hours)

Inlet pump	158	AST Pump	202	MS Pump	6
AST Blower	766	Outlet Pump	325	GW Pumps	#4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-8-17 **Time:** 0830

Temp: 55°

Total Discharge: 363012 gal

Daily Discharge 13,193 gal

AST Pressure: 62.0 in WC

Oxidizer Main Temp: 642.3 °F

Oxidizer High Temp: 634.5 °F

Element Temp: 887 °F

Room Temp: 63.4 °F

Inf water PH 8.07 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 24 #

Mag Gauge Flow: .90 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 0

Surge Counter: 249

Defoamer level: 5 gals.

Run Times (hours)

Inlet pump 153 AST Pump 198 MS Pump 6

AST Blower 742 Outlet Pump 313 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-7-17 **Time:** 0915

Temp: 57° rain

Total Discharge:	349819	gal	**Mag Gauge Flow:**	.80	(0.50-1.0)
Daily Discharge	13,279	gal	**System Status: (Arrival)**	ON	
AST Pressure:	61.7	in WC	**System Status: (Departure)**	ON	
Oxidizer Main Temp:	638.0	°F			
Oxidizer High Temp:	624.4	°F	**Sample Collected:**	NO	
Element Temp:	922	°F	**Bag Filters Replaced:**	NO	
Room Temp:	63.7	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	7.38	PH	**Remianing Cartridge Filters:**	0	
Inf Bag Filter DP:	0/0	PSI			
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	24	#	**Defoamer level:**	7 gals.	

Run Times (hours)

Inlet pump 149 AST Pump 195 MS Pump 6

AST Blower 719 Outlet Pump 301 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

SVE
316

Cell 2 GW Pump and Treat System Data Log

Date: 6-6-17 **Time:** _____

Temp: 66° SUNNY. .80

Total Discharge:	336540	gal	**Mag Gauge Flow:**	___	(0.50-1.0)
Daily Discharge	9754	gal	**System Status:** (Arrival)	ON	
AST Pressure:	61.1	in WC			
Oxidizer Main Temp:	666.7	°F	**System Status:** (Departure)	ON	
Oxidizer High Temp:	634.4	°F	**Sample Collected:**	No	
Element Temp:	876	°F	**Bag Filters Replaced:**	yes	
Room Temp:	69.7	°F	**Cartridge Filters Replaced:**	No	
Inf water PH	7.80	PH			
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge Filters:**	0	
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	26	#	**Defoamer level:**	7 gals.	

Run Times (hours)

Inlet pump 144 AST Pump 192 MS Pump 6

AST Blower 695 Outlet Pump 289 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-5-17 **Time:** _____

Temp: 71° RAIN

Total Discharge:	326786	gal	**Mag Gauge Flow:**	.90	(0.50-1.0)
Daily Discharge	6922	gal	**System Status:** (Arrival)	OFF	
AST Pressure:	60.4	in WC			
Oxidizer Main Temp:	635.1	°F	**System Status:** (Departure)	ON	
Oxidizer High Temp:	616.7	°F	**Sample Collected:**	NO	
Element Temp:	789	°F	**Bag Filters Replaced:**	NO	
Room Temp:	73	°F	**Cartridge Filters Replaced:**	NO	
Inf water PH	8.00	PH			
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge Filters:**	0	
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	26	#	**Defoamer level:**	7 gals.	

Run Times (hours)

Inlet pump 140 AST Pump 189 MS Pump 6

AST Blower 678 Outlet Pump 280 GW Pumps #4 well pump.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-2-17 **Time:** _____

Temp: 58° Sunny.

Total Discharge:	319864	gal	**Mag Gauge Flow:**	.90	(0.50-1.0)
Daily Discharge	13,517	gal	**System Status: (Arrival)**	ON	
AST Pressure:	62.1	in WC			
Oxidizer Main Temp:	661.4	°F	**System Status: (Departure)**	ON	
Oxidizer High Temp:	641.4	°F	**Sample Collected:**	No	
Element Temp:	805	°F	**Bag Filters Replaced:**	yes.	
Room Temp:	67.1	°F	**Cartridge Filters Replaced:**	No	
Inf water PH	8.13	PH			
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge Filters:**	0	
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	249	
Remaining Bag Filters:	26	#	**Defoamer level:**	9 gals.	

Run Times (hours)

Inlet pump 138 AST Pump 187 MS Pump 6

AST Blower 665 Outlet Pump 274 GW Pumps #4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

Date: 6-1-17 **Time:** _____

Temp: 62°

Total Discharge: 306347 gal

Daily Discharge 13,694 gal

AST Pressure: 61.7 in WC

Oxidizer Main Temp: 666.7 °F

Oxidizer High Temp: 642.0 °F

Element Temp: 850 °F

Room Temp: 64.8 °F

Inf water PH 8.36 PH

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: .90 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: NO

Remianing Cartridge Filters: 30

Surge Counter: 249.

Defoamer level: full

Run Times (hours)

Inlet pump 133 AST Pump 182 MS Pump 6

AST Blower 641 Outlet Pump 262 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-30-17 **Time:** _____ **Temp:** 76°

SVE Process Vacuum: 37.6 in WC

Sparge PSI: 9.5 PSI

SVE Process Flow: 1.4 IN H20

Sparge Temp: 87.0 °F

Control Room Temp: 55 °F

XP Room Temp: 60 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 1824

Sparge Run Time: 1823

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-26-17 **Time:** 0945 **Temp:** 71°

SVE Process Vacuum: 35.9 in WC

Sparge PSI: 9.7 PSI

SVE Process Flow: 1.4 IN H20

Sparge Temp: 91.0 °F

Control Room Temp: 58 °F

XP Room Temp: 64 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

SVE Run Time: 1802

Sparge Run Time: 1801

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-28-17 **Time:** _____ **Temp:** 61°

SVE Process Vacuum: 37.3 in WC

Sparge PSI: 8.7 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 77.1 °F

Control Room Temp: 51 °F

XP Room Temp: 56 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 1775

Sparge Run Time: 1774

After cooler 1774

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-27-17 **Time:** 0730 **Temp:** 68°

SVE Process Vacuum: 38.8 in WC

Sparge PSI: 8.9 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 79.9 °F

Control Room Temp: 52 °F

XP Room Temp: 56 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 1751

Sparge Run Time: 1751

After cooler time: 1751

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-26-17 **Time:** _____ **Temp:** 66°

SVE Process Vacuum: 38.5 in WC

Sparge PSI: 8.9 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 79.7 °F

Control Room Temp: 51 °F

XP Room Temp: 57 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 1727

Sparge Run Time: 1726

After cooler " 1726

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-23-17 **Time:** _____

Temp: 77° Overcast

SVE Process Vacuum:	40.6	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	9.6	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.4	SCFM		
Sparge Temp:	88.2	°F	**Air Sample Collected:**	NO
Control Room Temp:	56	°F	**SVE Run Time:**	1654
XP Room Temp:	58	°F	**Sparge Run Time:**	1654

SVE Blower time 1655

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-22-17 **Time:** _____

Temp: 78°

SVE Process Vacuum: 38.2 in WC

Sparge PSI: 9.8 PSI

SVE Process Flow: 1.4 SCFM

Sparge Temp: 91.2 °F

Control Room Temp: 58 °F

XP Room Temp: 91.2 °F

System Status: ON
(Arrival)

System Status: ON
(Departure)

Air Sample Collected: NO

SVE Run Time: 1633

Sparge Run Time: 1633

After cooler 1633

Maintenance Work Performed, Adjustments Made and Comments:

Serviced the sparge pump.

Cell 3 AS/SVE System Data Log

Date: 6-21-17 **Time:** _____

Temp: 72° Sunny.

SVE Process Vacuum:	39.7	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	9.3	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.4"	SCFM		
Sparge Temp:	82.9	°F	**Air Sample Collected:**	NO
Control Room Temp:	55	°F	**SVE Run Time:**	1607
XP Room Temp:	82.9	°F	**Sparge Run Time:**	1607

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-20-17 **Time:** _____

Temp: 80° SUNNY

SVE Process Vacuum:	40.2	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	9.4	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	82.9	°F	**Air Sample Collected:**	NO
Control Room Temp:	55	°F	**SVE Run Time:**	1583
XP Room Temp:	59	°F	**Sparge Run Time:**	1583
			After Cooler	1583

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-19-17 **Time:** _____

Temp: 80° Sunny

SVE Process Vacuum: 40.7 in WC

Sparge PSI: 9.9 PSI

SVE Process Flow: 1.4 SCFM

Sparge Temp: 90.8 °F

Control Room Temp: 59 °F

XP Room Temp: 62 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 1490

Sparge Run Time: 1490

Sparge Blower 1559.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-16-17 **Time:** 1000

Temp: 69° cloudy

SVE Process Vacuum:	40.1	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	9.9	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.4	SCFM		
Sparge Temp:	84	°F	**Air Sample Collected:**	No
Control Room Temp:	56	°F	**SVE Run Time:**	1490
XP Room Temp:	59	°F	**Sparge Run Time:**	1490
			After cooler "	1490

Maintenance Work Performed, Adjustments Made and Comments:

Power back on at 8AM 6/16/17.

Cell 3 AS/SVE System Data Log

Date: 6-15-17 **Time:** 1000

Temp: 75

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) Off

System Status: (Departure) Off

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

Power Out!

Cell 5 AS/SVE System Data Log

Date: 6-14-17 **Time:** 0900

Temp: 80°

SVE Process Vacuum:	38.6	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	9.9	PSI H^2O		
SVE Process Flow:	2.1	IN ~~SCFM~~	**System Status:** (Departure)	ON
Sparge Temp:	92.2	°F	**Air Sample Collected:**	No
Control Room Temp:	61	°F	**SVE Run Time:**	1,467
XP Room Temp:	64	°F	**Sparge Run Time:**	1,467

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-13-17 **Time:** _____

Temp: 86°

SVE Process Vacuum:	36.6	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	10.3	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.3	SCFM		
Sparge Temp:	105	°F	**Air Sample Collected:**	NO
Control Room Temp:	68	°F	**SVE Run Time:**	1445
XP Room Temp:	73	°F	**Sparge Run Time:**	1445

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-12-17 **Time:** _____

Temp: 73°

SVE Process Vacuum:	37.9	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	9.4	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	84.9	°F	**Air Sample Collected:**	NO
Control Room Temp:	56	°F	**SVE Run Time:**	1417
XP Room Temp:	58	°F	**Sparge Run Time:**	1417

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-9-17 **Time:** _____

Temp: 59° SUNNY.

SVE Process Vacuum:	44.0	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.8	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	72.8	°F	**Air Sample Collected:**	NO
Control Room Temp:	50	°F	**SVE Run Time:**	1345
XP Room Temp:	54	°F	**Sparge Run Time:**	1345

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-8-17 **Time:** _____

Temp: 55°

SVE Process Vacuum:	41.9	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.8	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.6	SCFM		
Sparge Temp:	69.9	°F	**Air Sample Collected:**	NO
Control Room Temp:	49	°F	**SVE Run Time:**	1322
XP Room Temp:	54	°F	**Sparge Run Time:**	1322
			After Cooler "	1322

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-7-17 **Time:** _____

Temp: 57° rain

SVE Process Vacuum:	41.7	in WC	**System Status: (Arrival)**	ON
Sparge PSI:	8.6	PSI	**System Status: (Departure)**	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	68.8	°F	**Air Sample Collected:**	NO
Control Room Temp:	49	°F	**SVE Run Time:**	1298
XP Room Temp:	51	°F	**Sparge Run Time:**	1298
			After cooler	1298

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-6-17 **Time:** _____

Temp: 66° Sunny.

SVE Process Vacuum:	43.3	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	9.2	PSI		
SVE Process Flow:	1.5	SCFM	**System Status:** (Departure)	ON
Sparge Temp:	79.0	°F	**Air Sample Collected:**	NO
Control Room Temp:	53.°	°F	**SVE Run Time:**	1274
XP Room Temp:	57	°F	**Sparge Run Time:**	1274

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-5-17 **Time:** _____

Temp: 71° Rain

SVE Process Vacuum:	42.2	in WC	**System Status:** (Arrival)	OFF
Sparge PSI:	9.4	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.3	SCFM		
Sparge Temp:	83.1	°F	**Air Sample Collected:**	NO
Control Room Temp:	55	°F	**SVE Run Time:**	1257
XP Room Temp:	58	°F	**Sparge Run Time:**	1257

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-2-17 **Time:** _____

Temp: 58°

SVE Process Vacuum:	40.8	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.7	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.5	SCFM		
Sparge Temp:	75.4	°F	**Air Sample Collected:**	NO
Control Room Temp:	51	°F	**SVE Run Time:**	1244
XP Room Temp:	55	°F	**Sparge Run Time:**	1244

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

Date: 6-1-17 **Time:** _____

Temp: 63°

SVE Process Vacuum:	41.1	in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.9	PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.3	SCFM		
Sparge Temp:	74.1	°F	**Air Sample Collected:**	No
Control Room Temp:	51	°F	**SVE Run Time:**	1220
XP Room Temp:	53	°F	**Sparge Run Time:**	1220

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 6-30-17 **Time:** 0900 **Temp:** 76°

Total Discharge: 12451602 Gal

Daily Discharge: 25,296 Gal

AST Pressure: 55.6 in WC

Dual Phase Vacuum: 20.6 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 84 °F

AST water PH 7.40 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 40 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 5 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 1182

Outlet Pump 1323

Booster Blower 2087

AST Blower 2087

MS Pump 944

Aeration Blower —

AST Pump 729

Dual Phase 1822

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 6-29-17 **Time:** 0950 **Temp:** 73°

Total Discharge: 12426306 Gal

Daily Discharge: 31,291 Gal

AST Pressure: 56.8 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 85 °F

AST water PH 8.71 pH(7.0-9.0)

Inf Bag Filter DP: 20/45 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge _____ #

Surge Counter: 25177

Remaining Defoamer: 4 Gallons

Run Times

Inlet Pump 1170

Outlet Pump 1309

Booster Blower 2065

AST Blower 2065

MS Pump 933

Aeration Blower 0

AST Pump 719

Dual Phase 1800

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 6-28-17 **Time:** _____ **Temp:** 61°

Total Discharge:	12395015	Gal	**Mag Gauge Flow:**	1.85 (1.50-2.00)	
Daily Discharge:	27,850	Gal	**System Status:** (Arrival)	ON	
AST Pressure:	57.5	in WC			
Dual Phase Vacuum:	20.4	in WC	**System Status:** (Departure)	ON	
Dual Phase Temp:	102	°F	**Sample Collected:**	No	
XP Room Temp:	78	°F	**Bag Filters Replaced:**	No	
AST water PH	6.79	pH(7.0-9.0)	**Cartridge Filters Replaced:**	No	
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge**	17	#
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	25,177	
Remaining Bag Filters:	39	#	**Remaining Defoamer:**	6 gals.	

Run Times

Inlet Pump	1155	Outlet Pump	1291	Booster Blower	2039
AST Blower	2038	MS Pump	919	Aeration Blower	—
AST Pump	708	Dual Phase	1774		

Maintenance Work Performed, Adjustments Made and Comments:

drained carbon tank outside - very little oil sprayed out.

turned acid down to 60 from 70 PH. 6.79

replaced leaking pipe nipples for the inf. bag filter canister

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 6-27-17 **Time:** 0930 **Temp:** 68°

Total Discharge:	12367165	Gal	**Mag Gauge Flow:**	1.60 (1.50-2.00)
Daily Discharge:	29,092	Gal	**System Status:** (Arrival)	ON
AST Pressure:	56.6	in WC		
Dual Phase Vacuum:	20.6	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	101	°F	**Sample Collected:**	No
XP Room Temp:	81	°F	**Bag Filters Replaced:**	No
AST water PH	8.19	pH(7.0-9.0)	**Cartridge Filters Replaced:**	No
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge**	17 #
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	25,177
Remaining Bag Filters:	41	#	**Remaining Defoamer:**	9 gals.

Run Times

Inlet Pump	1141	Outlet Pump	1274	Booster Blower	2015
AST Blower	2014	MS Pump	906	Aeration Blower	—
AST Pump	697	Dual Phase	1750		

Maintenance Work Performed, Adjustments Made and Comments:

- slight hyd. oil mist at the outside carbon tank drain value.
- filled the acid reservoir – 55 gals.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 6-26-17 **Time:** _____ **Temp:** 66°

Total Discharge: 12338073 Gal 88593 ÷3

Daily Discharge: 29,531 Gal

AST Pressure: 56.7 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 81 °F

AST water PH 8.20 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 41 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 17 #

Surge Counter: 25,177

Remaining Defoamer: 10 gall.

Run Times

Inlet Pump 1127 Outlet Pump 1257 Booster Blower 1991

AST Blower 1990 MS Pump 893 Aeration Blower —

AST Pump 687 Dual Phase 1726

Maintenance Work Performed, Adjustments Made and Comments:

hyd. oil tank down 1/4" — level still within operating range.

Cell 5 GW Pump and Treat System Data Log

Date: 6-23-17 **Time:** _____

Temp: 77° overcast

Total Discharge: 12249480 Gal

Daily Discharge: 27,516 Gal

AST Pressure: 54.9 in WC

Dual Phase Vacuum: 20.9 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 87 °F

AST water PH 8.19 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 41 #

Mag Gauge Flow: 1.95 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 17 #

Surge Counter: 25,177

Remaining Defoamer: full

Run Times

Inlet Pump 1084 Outlet Pump 1206 Booster Blower 1918

AST Blower 1918 MS Pump 854 Aeration Blower —

AST Pump 654 Dual Phase 1653

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 6-22-17 **Time:** 1030

Temp: 78°

Total Discharge: 1222964 Gal

Daily Discharge: 33,585 Gal

AST Pressure: 54.5 in WC

Dual Phase Vacuum: 20.6 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 88 °F

AST water PH 8.12 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 45 #

Mag Gauge Flow: 1.55 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 20 #

Surge Counter: 25,177

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 1070 Outlet Pump 1189 Booster Blower 1896

AST Blower 1896 MS Pump 842 Aeration Blower —

AST Pump 644 Dual Phase 1631

Maintenance Work Performed, Adjustments Made and Comments:

hyd. oil tank level — 1/8" from the set mark

hyd. tank. Full — 3/16" down from leak

Cell 5 GW Pump and Treat System Data Log

Date: 6-21-17 **Time:** 0900

Temp: 72° SUNNY

Total Discharge:	12188379	Gal	**Mag Gauge Flow:**	1.55 (1.50-2.00)
Daily Discharge:	31,051	Gal	**System Status:** (Arrival)	ON
AST Pressure:	55.9	in WC	**System Status:** (Departure)	ON
Dual Phase Vacuum:	20.7	in WC		
Dual Phase Temp:	102	°F	**Sample Collected:**	NO
XP Room Temp:	83	°F	**Bag Filters Replaced:**	NO
AST water PH	7.27	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge**	20 #
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	25,177
Remaining Bag Filters:	45	#	**Remaining Defoamer:**	10 gals.

Run Times

Inlet Pump	1054	Outlet Pump	1170	Booster Blower	1870
AST Blower	1870	MS Pump	827	Aeration Blower	—
AST Pump	631	Dual Phase	1605		

Maintenance Work Performed, Adjustments Made and Comments:

6/21 hyd. oil level in tank dropped approx. 1/16"
light mist coming from the carbon tank outside.
system running w/o issues other than the above. M. Teufsch

Cell 5 GW Pump and Treat System Data Log

Date: 6-20-17 **Time:** 0900

Temp: 71° Sunny

Total Discharge:	12157328	Gal	**Mag Gauge Flow:**	1.55 (1.50-2.00)
Daily Discharge:	31,157	Gal	**System Status:** (Arrival)	ON
AST Pressure:	56.0	in WC		
Dual Phase Vacuum:	20.7	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	102	°F	**Sample Collected:**	NO
XP Room Temp:	82	°F	**Bag Filters Replaced:**	NO
AST water PH	8.28	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO
Inf Bag Filter DP:	0/0	PSI		
			Remianing Cartridge	20 #
Eff Bag Filter DP:	0/0	PSI		
			Surge Counter:	25,177
Remaining Bag Filters:	50	#	**Remaining Defoamer:**	8 gals.

Run Times

Inlet Pump	1038	Outlet Pump	1153	Booster Blower	1847
AST Blower	1846	MS Pump	813	Aeration Blower	—
AST Pump	619	Dual Phase	1582		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 6-19-17 **Time:** 1030

Temp: 80°

Total Discharge:	12126171	Gal 89,327 ÷3	**Mag Gauge Flow:**	2.0 (1.50-2.00)
Daily Discharge:	29,775	Gal	**System Status:** (Arrival)	ON
AST Pressure:	55.2	in WC		
Dual Phase Vacuum:	20.5	in WC	**System Status:** (Departure)	ON
Dual Phase Temp:	102	°F	**Sample Collected:**	No
XP Room Temp:	88	°F	**Bag Filters Replaced:**	
AST water PH	7.01	pH(7.0-9.0)	**Cartridge Filters Replaced:**	
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge**	20 #
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	25,177
Remaining Bag Filters:	52	#	**Remaining Defoamer:**	10 gals.

Run Times

Inlet Pump	1023	Outlet Pump	1137	Booster Blower	1823
AST Blower	1822	MS Pump	799	Aeration Blower	—
AST Pump	608	Dual Phase	1558		

Maintenance Work Performed, Adjustments Made and Comments:

Booster blower pumping hyd. oil outside to the first carbon tank. Hyd. tank was at 1/2 full; now 1/4 6/19/17 (BT)

Cell 5 GW Pump and Treat System Data Log

Date: 6-16-17 **Time:** 1120

Temp: 70° cloudy.

Total Discharge: 12036844 Gal

Daily Discharge: 34,264 Gal

AST Pressure: 55.9 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 83 °F

AST water PH 8.28 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 42 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 24 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 979 Outlet Pump 1089 Booster Blower 1755

AST Blower 1754 MS Pump 760 Aeration Blower —

AST Pump 574 Dual Phase 1490

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 6-15-17 **Time:** 0944

Temp: 80

Total Discharge: 12002580 Gal

Daily Discharge: 28,156 Gal

AST Pressure: 54.0 in WC

Dual Phase Vacuum: 21.1 in WC

Dual Phase Temp: 83° °F

XP Room Temp: 79 °F

AST water PH 8.50 pH(7.0-9.0)

Inf Bag Filter DP: 50/25 PSI

Eff Bag Filter DP: 0/20 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) Off

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: JW ~~N~~ Y

Cartridge Filters Replaced: JW ~~N~~ Y

Remianing Cartridge _____ #

Surge Counter: 25177

Remaining Defoamer: 10 Gallons

Run Times

Inlet Pump 962 Outlet Pump 1071 Booster Blower 1730

AST Blower 1729 MS Pump 745 Aeration Blower 0

AST Pump 562 Dual Phase 1465

Maintenance Work Performed, Adjustments Made and Comments:

Power was off upon arrival. Alarm tripped @ 0538. Power restored @ 0857

Cell 5 GW Pump and Treat System Data Log

Date: 6-14-17 **Time:** 0915

Temp: 82°

Total Discharge: 11,974,424 Gal

Daily Discharge: 29,088 Gal

AST Pressure: 55.3 in WC

Dual Phase Vacuum: 20.2 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 89 °F

AST water PH 8.06 pH(7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 15 #

Surge Counter: 25,177

Remaining Defoamer: 1/2

Run Times

Inlet Pump 947

Outlet Pump 1055

Booster Blower 1709

AST Blower 1708

MS Pump 732

Aeration Blower 0

AST Pump 552

Dual Phase 1444

Maintenance Work Performed, Adjustments Made and Comments:

Increased Acid pump to 70, pH was at 8.66
Decreased to 8.06 prior to departure

Cell 5 GW Pump and Treat System Data Log

Date: 6-13-17 **Time:** _____

Temp: 86°

Total Discharge:	11945336	Gal	**Mag Gauge Flow:**	1.80 (1.50-2.00)	
Daily Discharge:	38,614	Gal	**System Status:** (Arrival)	ON	
AST Pressure:	54.2	in WC			
Dual Phase Vacuum:	20.3	in WC	**System Status:** (Departure)	ON	
Dual Phase Temp:	103	°F	**Sample Collected:**	No	
XP Room Temp:	93	°F	**Bag Filters Replaced:**	NO	
AST water PH	8.54	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO	
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge**	15	#
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	25,177	
Remaining Bag Filters:	46	#	**Remaining Defoamer:**	10 gals.	

Run Times

Inlet Pump	933	Outlet Pump	1040	Booster Blower	1687
AST Blower	1686	MS Pump	719	Aeration Blower	—
AST Pump	541	Dual Phase	1422		

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 6-12-17 **Time:** 0830

Temp: 73°

Total Discharge: 11906722 Gal 100,160 ÷ 3

Daily Discharge: 33,386 Gal

AST Pressure: 55.5 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 83 °F

AST water PH 6.91 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 15 #

Surge Counter: 25,177

Remaining Defoamer: 11 galls.

Run Times

Inlet Pump 913 Outlet Pump 1019 Booster Blower 1659

AST Blower 1658 MS Pump 702 Aeration Blower ✓

AST Pump 526 Dual Phase 1394

Maintenance Work Performed, Adjustments Made and Comments:

Set Acid back to 65

Cell 5 GW Pump and Treat System Data Log

Date: 6-9-17 **Time:** _____

Temp: 59° Sunny

Total Discharge: 11806562 Gal

Daily Discharge: 28,003 Gal

AST Pressure: 56.5 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 73 °F

AST water PH 7.25 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.50 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 15 #

Surge Counter: 25,177

Remaining Defoamer: full

Run Times

Inlet Pump 862 Outlet Pump 967 Booster Blower 1587

AST Blower 1586 MS Pump 658 Aeration Blower —

AST Pump 489 Dual Phase 1322

Maintenance Work Performed, Adjustments Made and Comments:

inlet pump set to 32
STripper pump on to 40
Acid pump set to 69 PH. 7.25

Cell 5 GW Pump and Treat System Data Log

Date: 6-8-17 **Time:** 0800

Temp: 55°

Total Discharge: 11778559 Gal

Daily Discharge: 32,526 Gal

AST Pressure: 58.2 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 105 °F

XP Room Temp: 69 °F

AST water PH 7.14 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 50 #

Mag Gauge Flow: 1.65 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 15 #

Surge Counter: 25,177

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 848 Outlet Pump 953 Booster Blower 1568

AST Blower 1567 MS Pump 646 Aeration Blower —

AST Pump 479 Dual Phase 1303

Maintenance Work Performed, Adjustments Made and Comments:

Acid pump set at 69

Cell 5 GW Pump and Treat System Data Log

Date: 6-7-17 **Time:** _____

Temp: 57° rain

Total Discharge: 11746065 Gal

Daily Discharge: 1820 Gal

AST Pressure: 57.1 in WC

Dual Phase Vacuum: 19.5 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 61 °F

AST water PH 9.70 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 50 #

Mag Gauge Flow: 1.50 (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 15 #

Surge Counter: 75,177

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 832 Outlet Pump 937 Booster Blower 1548

AST Blower 1547 MS Pump 633 Aeration Blower —

AST Pump 468 Dual Phase 1283

Maintenance Work Performed, Adjustments Made and Comments:

Cell was shut down over night so well water levels could be recorded on daylight of 6-7-17.

Cell 5 GW Pump and Treat System Data Log

Date: 6-6-17 **Time:** _____

Temp: 66° Sunny.

Total Discharge: 11744245 Gal

Daily Discharge: 18,423 Gal

AST Pressure: 56.2 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 78 °F

AST water PH 6.8 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 22 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 24 #

Surge Counter: 25,177

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 829 Outlet Pump 935 Booster Blower 1544

AST Blower 1543 MS Pump 631 Aeration Blower —

AST Pump 466 Dual Phase 1280

Maintenance Work Performed, Adjustments Made and Comments:

Shut down at 8:45 for repairs

Cell 5 GW Pump and Treat System Data Log

Date: 6-5-17 **Time:** _____

Temp: 71° rain

Total Discharge: 11725767 Gal

Daily Discharge: 19,390 Gal

AST Pressure: 56.2 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 78 °F

AST water PH 7.6 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 24 #

Surge Counter: 25,177

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 813 Outlet Pump 925 Booster Blower 1527

AST Blower 1526 MS Pump 621 Aeration Blower —

AST Pump 458 Dual Phase 1263

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 6-2-17 **Time:** _____

Temp: 58°

Total Discharge: 11706377 Gal

Daily Discharge: 39,032 Gal

AST Pressure: 57.1 in WC

Dual Phase Vacuum: 20.7 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 79 °F

AST water PH 8.48 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 27 #

Surge Counter: 25,177

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 801

Outlet Pump 915

Booster Blower 1515

AST Blower 1514

MS Pump 611

Aeration Blower —

AST Pump 450

Dual Phase 1251

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

Date: 6-1-17 **Time:** _____

Temp: 62°

Total Discharge:	11667345	Gal	**Mag Gauge Flow:**	1.70 (1.50-2.00)	
Daily Discharge:	3715	Gal	**System Status:** (Arrival)	OFF	
AST Pressure:	55.7	in WC			
* **Dual Phase Vacuum:**	7.6	in WC	**System Status:** (Departure)	ON	
Dual Phase Temp:	20.8	°F	**Sample Collected:**	NO	
XP Room Temp:	79°	°F	**Bag Filters Replaced:**	NO	
AST water PH	9.10	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO	
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge**	30	#
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	25177	
Remaining Bag Filters:	30	#	**Remaining Defoamer:**	9 gals.	

Run Times

Inlet Pump	780	Outlet Pump	894	Booster Blower	1492
AST Blower	1491	MS Pump	590	Aeration Blower	—
AST Pump	433	Dual Phase	1228		

Maintenance Work Performed, Adjustments Made and Comments:

* Dual phase blower low vacuum alarm. 6/1/17 07:04AM.

3 vault valves were left open from tests. closed valves started system - OK -

Acid pump on 65

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 6-30-17 Time: _____ Temp: 76°

System Status: OFF

Generator Status: OFF

Generator Hours: _____

Vacuum IN Hg: _____

DPT 101: _____

DPT 102: _____

Blower Temperature: _____

Blower Outlet PSI: _____

Blower Hours (B-101): _____

Discharge Water Total: _____

# of Active Wells: _____

Bag Filters Changed: _____

Generator Fuel Level: _____

Carroll Fuel Tank Level: _____

Product Drum Level: _____

Product Tank Measurement: _____
(Weekly)

Product Transfer Pump Cycles: _____

P-101 Hours: _____

Arrival: T1: _____ T2: _____ T3: _____

Departure: T1: _____ T2: _____ T3: _____

Additional Notes/ Maintenance Performed

System was shut down at 1500 hrs. on 6/29/17 due to up coming extended Holiday (5 days)

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date:	6-29-17	**Time:**	0900
Temp:	70°		
System Status:	On	**Discharge Water Total:**	262 796
Generator Status:	On	**# of Active Wells:**	16
Generator Hours:	1973	**Bag Filters Changed:**	N
Vacuum IN Hg:	10	**Generator Fuel Level:**	Res 7/8 Full
DPT 101:	0.45	**Carroll Fuel Tank Level:**	3/4 Full
DPT 102:	1.10	**Product Drum Level:**	20 Gallons
Blower Temperature:	200	* **Product Tank Measurement:** (Weekly)	384 Gallons
Blower Outlet PSI:	30	**Product Transfer Pump Cycles:**	11
Blower Hours (B-101):	694	**P-101 Hours:**	145

Arrival:	T3: 455	T2: 456	T1: 350
Departure:	T3: 461	T2: 468	T1: 350

Additional Notes/ Maintenance Performed

- Shutdown @ 1500

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 6/28/17 Time: 0800 Temp: 70°

System Status: On Discharge Water Total: 260888

Generator Status: On # of Active Wells: 15

Generator Hours: 1945 Bag Filters Changed: N

Vacuum IN Hg: 10 Generator Fuel Level: Reserve Tank 1/2 full

DPT 101: 0.45 Carroll Fuel Tank Level: Full

DPT 102: 1.05 Product Drum Level: 25 G

Blower Temperature: 180° Product Tank Measurement: Check Tomorrow 6/29/17
(Weekly)

Blower Outlet PSI: 30 Product Transfer Pump Cycles: 10

Blower Hours (B-101): 669 P-101 Hours: 142

Arrival: T1: ~~405~~ 350 T2: 399 T3: 405

Departure: T1: 350 T2: 440 T3: 440

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date:	6/27/17	Time: 0900	Temp: 71°
System Status:	On	Discharge Water Total:	259750
Generator Status:	On	# of Active Wells:	16
Generator Hours:	1923	Bag Filters Changed:	N
Vacuum IN Hg:	9.6	Generator Fuel Level:	Reserve Full (~1/8 Main
DPT 101:	0.45	Carroll Fuel Tank Level:	Full
DPT 102:	1.05	Product Drum Level:	34 Gallons
Blower Temperature:	190	Product Tank Measurement: (Weekly)	\
Blower Outlet PSI:	38	Product Transfer Pump Cycles:	9
Blower Hours (B-101):	646	P-101 Hours:	141

Arrival:	T1: 350	T2: 397	T3: 404
Departure:	T1: ~~449~~ 354	T2: 458	T3: 454

Additional Notes/ Maintenance Performed

- Had 2 alarms - 6/26 @1544 - AM Power Supply Low/High Frequency
  - 6/27 @0333 - " " "
- System still operating. Alarms seemed to deactivate as soon as they were activated
- Adjusted Voltage Regulator on generator (208 Volts @ min.)

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 6/26/17 Time: 1330 Temp: 80°

System Status: On Discharge Water Total: 259,182

Generator Status: On # of Active Wells: 17

Generator Hours: 1904 Bag Filters Changed: N

Vacuum IN Hg: 9.4 Generator Fuel Level: Main 3/4 full

DPT 101: 0.5 Carroll Fuel Tank Level: full

DPT 102: 1.05 Product Drum Level: 30 Gallon

Blower Temperature: 200 Product Tank Measurement: (Weekly)

Blower Outlet PSI: 38 Product Transfer Pump Cycles: 9

Blower Hours (B-101): 627 P-101 Hours: 140

Arrival:	T1: 359	T2: 452	T3: 448
Departure:	T1: 414	T2: 529	T3: 529
@1500	T1: 350	T2: 415	T3: 418

Additional Notes/ Maintenance Performed

CELL 6 DATA LOG

Date: 6-21-17 **Time:** 0850

Outside Temp: 75° **Weather Conditions:** Sunny Clear

System Status: Active **Discharge Water Total:** 259,136

Generator Status: ON **# of Active Wells:** 16

Generator Hours: 1895 **~~Cartridge~~ Bag Filters Changed:** No

Vacuum IN Hg: 12.8 **Generator Fuel Level:** Trailer Tank: 3/4

DPT 101: .22 **Carroll Fuel Tank Level:** Empty

DPT 102: .80 **Product Drum Level:** 29 gal

Blower Temperature: 223 **Product Tank Measurement:** -

Blower Outlet PSI: 27 (Weekly) **Product Transfer Pump Cycles:** 9

Blower Hours (B-101): 624 **P-101 Hours:** 140

Arrival:	**T1:** 350	**T2:** 371	**T3:** 382
Departure:	**T1:** —	**T2:** —	**T3:** —

Additional Notes/ Maintenance Performed

Shutoff system to change oil in blower 0910
System Left OFF for further Maint.

CELL 6 DATA LOG

Date: 6-20-17 **Time:** 0900

Outside Temp: 77 **Weather Conditions:** Clear 77

System Status: Active **Discharge Water Total:** 256,443

Generator Status: ON **# of Active Wells:** 16

Generator Hours: 1871.8 **Cartridge Filters Changed:** No

Vacuum IN Hg: 13.1 **Generator Fuel Level:** Full

DPT 101: .25 **Carroll Fuel Tank Level:** Empty

DPT 102: .75 **Product Drum Level:** 27 gal

Blower Temperature: 240° **Product Tank Measurement:** 11'4 - 329 gal
(Weekly)

Blower Outlet PSI: 24 **Product Transfer Pump Cycles:** 9

Blower Hours (B-101): 601 **P-101 Hours:** 135

Arrival:	**T1:** 350	**T2:** 383	**T3:** 381
Departure:	**T1:** 350	**T2:** 391	**T3:** 400

Additional Notes/ Maintenance Performed

CELL 6 DATA LOG

Date: 6-19-17 **Time:** 0830

Outside Temp: 75 **Weather Conditions:** Partly Cloudy - T-storm afternoon

System Status: Active **Discharge Water Total:**

Generator Status: ON **# of Active Wells:** 16

Generator Hours: 1856 **Cartridge Filters Changed:** Yes

Vacuum IN Hg: 14 **Generator Fuel Level:** 1/4 tank – Filled

DPT 101: 25 **Carroll Fuel Tank Level:** 1/2 tank – Emptied

DPT 102: 75 **Product Drum Level:** 16 gal

Blower Temperature: 230 **Product Tank Measurement:** 11'1/4
(Weekly)

Blower Outlet PSI: 30 **Product Transfer Pump Cycles:** 9

Blower Hours (B-101): 578 **P-101 Hours:** 134

Arrival:	**T1:** 350	**T2:** 369	**T3:** 381
Departure:	**T1:** 350	**T2:** 403	**T3:** 412

Additional Notes/ Maintenance Performed

CELL 6 DATA LOG

Date: 6/15/17 **Time:** 1100

Outside Temp: 85 **Weather Conditions:** Hot

System Status: On FT-501: → **Discharge Water Total:** 223565

Generator Status: On FT-101: 119008 **# of Active Wells:** 16

Generator Hours: 1758 **Cartridge Filters Changed:** N

Vacuum IN Hg: 14.8 **Generator Fuel Level:** Res. Tank 3/4 full

DPT 101: 0.34 **Carroll Fuel Tank Level:** Full

DPT 102: 0.55 **Product Drum Level:** 20 Gallons

Blower Temperature: 275 **Product Tank Measurement:** (Weekly)

Blower Outlet PSI: 16 "H_2O **Product Transfer Pump Cycles:**

Blower Hours (B-101): 486 **P-101 Hours:** 92

Arrival: **T1:** 402 **T2:** 396 **T3:** 350

Departure: **T1:** **T2:** **T3:**

Same as Arrival

Additional Notes/ Maintenance Performed

Topped Off Generator w/ fuel – 120 Gallons

CELL 6 DATA LOG

Date: 6-14-17 **Time:** 0930

Outside Temp: 83° **Weather Conditions:** Sunny, Hot

System Status: ON **Discharge Water Total:** 211,453

Generator Status: ON **# of Active Wells:** 16

Generator Hours: 1,731 **~~Cartridge~~ Bag Filters Changed:** No

Vacuum IN Hg: 12 **Generator Fuel Level:** 1/2 Main - Full Reser

DPT 101: .70 **Carroll Fuel Tank Level:** Full

DPT 102: .90 **Product Drum Level:** 23

Blower Temperature: 225° **Product Tank Measurement:** 9¼" =

(Weekly)

Blower Outlet PSI: 27 **Product Transfer Pump Cycles:** 5

Blower Hours (B-101): 455 **P-101 Hours:** 78

Arrival:	**T1:** 350	**T2:** 387	**T3:** 395
Departure:	**T1:** 350	**T2:** 392	**T3:** 399

Additional Notes/ Maintenance Performed

CELL 6 DATA LOG

Date: 6-13-17 **Time:** 0915

Outside Temp: 84° **Weather Conditions:** Sunny/Clear/Hot

System Status: ON/Active **Discharge Water Total:** 204,921

Generator Status: ON **# of Active Wells:** 17

Generator Hours: 1,706 **~~Cartridge~~ Bag Filters Changed:** No

Vacuum IN Hg: 11.7 **Generator Fuel Level:** Full

DPT 101: .55 **Carroll Fuel Tank Level:** Full

DPT 102: .85 **Product Drum Level:** 15 gal

Blower Temperature: 225°F **Product Tank Measurement:** (Weekly)

Blower Outlet PSI: 28 **Product Transfer Pump Cycles:** 4

Blower Hours (B-101): 433 **P-101 Hours:** 72

Arrival:	**T1:** 350	**T2:** 385	**T3:** 393
Departure:	**T1:** 350	**T2:** 410	**T3:** 416

Carbon Hours 825.5

Additional Notes/ Maintenance Performed

Carroll Fuel Filled

CELL 6 DATA LOG

Date: 6-12-16

Time: 0845

Outside Temp: 83°

Weather Conditions: Clear, Sunny, HOT

System Status: Arrival: OFF
Departure: ON

Discharge Water Total: 199,630

Generator Status: Running

# of Active Wells: 17

Generator Hours: 1,682

~~Cartridge~~ Bag Filters Changed: Yes

Vacuum IN Hg: 12.5

Generator Fuel Level: Full

DPT 101: 0.55

Carroll Fuel Tank Level: Empty

DPT 102: 0.85

Product Drum Level: 30 gal

Blower Temperature: 160

Product Tank Measurement: (Weekly)

Blower Outlet PSI: 62

Arrival:	**T1:** 41	**T2:** 41	**T3:** 41
Departure:	**T1:** 350°	**T2:** 400	**T3:** 404

Additional Notes/ Maintenance Performed

- System down upon arrival due to Filter housing high pressure
- Restarted after filters changed
- 0920- Catox shutoff due to high temp in T3
- 0930- Restarted
- Placed oil Boom in #4 Settling tank
-

CELL 6 DATA LOG

Date: 6-9-17 **Time:** 0830

Outside Temp: 64° **Weather Conditions:** Clear skies

System Status: Active **Discharge Water Total:** 199004

Generator Status: ON **# of Active Wells:** 17

Generator Hours: 1,610 **~~Cartridge~~ Bag Filters Changed:** NO

Vacuum IN Hg: 12.0 **Generator Fuel Level:** 1/2 tank in Main

DPT 101: 0.50 **Carroll Fuel Tank Level:** 1/2

DPT 102: 0.80 **Product Drum Level:** 30 gal

Blower Temperature: 205° F **Product Tank Measurement:** (Weekly)

Blower Outlet PSI: 29 **Product Transfer Pump Cycles:** 3

Arrival:	**T1:** 350	**T2:** 379	**T3:** 390
Departure:	**T1:** 349	**T2:** 444	**T3:** 496

Additional Notes/ Maintenance Performed

B101 - Blower Hours 406

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-31-17 **Time:** _____ **Temp:** 64°

SVE Process Vacuum: 47.8 in WC

Sparge PSI: 13.0 PSI

SVE Process Flow: 2.6 SCFM

Sparge Temp: 103 °F

Sparge Room Temp: 85 °F

XP Room Temp: 80 °F

Sparge Run Time: 2380

SVE Run Time: 2380

(Arrival) **System Status:** OFF.

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: ~~H.T~~ 166°

PID at TI 101: 11.7 ppm

PID at MID Carbon: 9.7 ppm

PID at EFF Carbon: 15.8 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	4	13	9	4	19	11	3
2	8	5	8	11	4	14	10	4	20	8	4
3	10	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	11	4	17	18	4	23	8	4
6	12	5	12	10	3	18	10	4	24	7	5
									25	OFF	

Total cfm: 186

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-28-17 **Time:** _____ **Temp:** 77°

SVE Process Vacuum: 50.7 in WC

Sparge PSI: 12.7 PSI

SVE Process Flow: 2.6 SCFM

Sparge Temp: 91 °F

Sparge Room Temp: 84 °F

XP Room Temp: 80 °F

Sparge Run Time: 2351

SVE Run Time: 2351

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: yes.

Temp at TI 101: 152

PID at TI 101: 21.6 ppm

PID at MID Carbon: 13.7 ppm

PID at EFF Carbon: 15.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	2	4	13	9	4	19	11	3
2	9	5	8	11	4	14	11	4	20	8	4
3	10	4	9	5	4	15	0	4	21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	2	5	11	11	3	17	17	4	23	8	4
6	12	5	12	10	3	18	10	4	24	7	4
									25	OFF	

Total cfm: 182

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-27-17 **Time:** 0830 **Temp:** 75°

SVE Process Vacuum: 51.3 in WC

Sparge PSI: 12.6 PSI

SVE Process Flow: 2.5 SCFM

Sparge Temp: 91 °F

Sparge Room Temp: 84 °F

XP Room Temp: 77 °F

Sparge Run Time: 2331

SVE Run Time: 2331

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: No

Temp at TI 101: 152

PID at TI 101: 27.6 ppm

PID at MID Carbon: 13.1 ppm

PID at EFF Carbon: 14.2 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	2	4	13	9	4	19	11	3
2	9	5	8	11	4	14	11	4	20	8	4
3	10	4	9	5	4	15	0	4	21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	2	5	11	11	3	17	17	4	23	8	4
6	12	5	12	10	3	18	10	4	24	7	4
									25	OFF	

Total cfm: 182

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-26-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 54.8 in WC

Sparge PSI: 12.7 PSI

SVE Process Flow: 2.5 SCFM

Sparge Temp: 89 °F

Sparge Room Temp: 89 °F

XP Room Temp: 84 °F

Sparge Run Time: 2307

SVE Run Time: 2308

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 164°

PID at TI 101: 46.6 ppm

PID at MID Carbon: 28.1 ppm

PID at EFF Carbon: 22.1 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	3	5	7	3	4	13	9	4	19	11	3
2	9	5	8	11	4	14	11	4	20	8	4
3	10	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	11	4	17	17	4	23	9	4
6	12	5	12	10	3	18	10	4	24	7	4
									25	OFF	

Total cfm: 189

Maintenance Work Performed, Adjustments Made and Comments:

fault alarm SVE VFD 8:29 PM yesterday

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-25-17 **Time:** _____ **Temp:** 90°

SVE Process Vacuum: 51.8 in WC

Sparge PSI: 12.7 PSI

SVE Process Flow: 2.4 SCFM

Sparge Temp: 89 °F

Sparge Room Temp: 88 °F

XP Room Temp: 85 °F

Sparge Run Time: 2294

SVE Run Time: 2294

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 160

PID at TI 101: 42 ppm

PID at MID Carbon: 21.7 ppm

PID at EFF Carbon: 33.1 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	4	13	9	4	19	11	3
2	8	5	8	11	4	14	10	4	20	8	4
3	10	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	11	4	17	18	4	23	8	4
6	12	5	12	10	3	18	10	4	24	7	5
									25	OFF	

Total cfm: 186

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-24-17 **Time:** 1015 **Temp:** 76°

SVE Process Vacuum: 51.5 in WC

Sparge PSI: 13.1 PSI

SVE Process Flow: 2.5 SCFM

Sparge Temp: 87 °F

Sparge Room Temp: 91 °F

XP Room Temp: 86 °F

Sparge Run Time: 2236

SVE Run Time: 2270

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 170

PID at TI 101: 32.7 ppm

PID at MID Carbon: 19.4 ppm

PID at EFF Carbon: 15.7 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	4	13	9	4	19	11	3
2	8	5	8	11	4	14	10	4	20	8	4
3	10	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	11	4	17	18	4	23	8	4
6	12	5	12	10	3	18	10	4	24	7	5
									25	OFF	

Total cfm: 186

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-21-17 **Time:** 0630 **Temp:** 80°

SVE Process Vacuum: 48.8 in WC

Sparge PSI: 12.0 PSI

SVE Process Flow: 2.5 SCFM

Sparge Temp: 104 °F

Sparge Room Temp: 96 °F

XP Room Temp: 89 °F

Sparge Run Time: 2236

SVE Run Time: 2236

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes.

Temp at TI 101: 170°

PID at TI 101: 21.1 ppm

PID at MID Carbon: 20.6 ppm

PID at EFF Carbon: 19.1 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	4	13	9	4	19	10	3
2	11	5	8	11	4	14	10	4	20	8	4
3	11	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	7	5	22	OFF	
5	3	5	11	12	3	17	18	4	23	8	4
6	11	5	12	10	3	18	9	4	24	7	4
									25	OFF	

Total cfm: 189

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-20-17 **Time:** 0940 **Temp:** 77°

SVE Process Vacuum: 50.8 in WC

Sparge PSI: 13.4 PSI

SVE Process Flow: 2.7 SCFM

Sparge Temp: 90 °F

Sparge Room Temp: 101 °F

XP Room Temp: 93 °F

Sparge Run Time: 2212

SVE Run Time: 2212

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 180°

PID at TI 101: 45 ppm

PID at MID Carbon: 37.0 ppm

PID at EFF Carbon: 23.5 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	4	13	9	4	19	10	3
2	11	5	8	11	4	14	10	4	20	8	4
3	11	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	7	5	22	OFF	
5	3	5	11	12	3	17	18	4	23	8	4
6	11	5	12	10	3	18	9	4	24	7	4
									25	OFF	

Total cfm: 189

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-19-17 **Time:** 1040 **Temp:** 75°

SVE Process Vacuum: 49.4 in WC

Sparge PSI: 11.4 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 99 °F

Sparge Room Temp: 100 °F

XP Room Temp: 94 °F

Sparge Run Time: 2204

SVE Run Time: 2204

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 182°

PID at TI 101: 32.3 ppm

PID at MID Carbon: 37.1 ppm

PID at EFF Carbon: 25.7 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	4	13	9	4	19	10	3
2	11	5	8	11	4	14	10	4	20	8	4
3	11	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	7	5	22	OFF	
5	3	5	11	12	3	17	18	4	23	8	4
6	11	5	12	10	3	18	9	4	24	7	4
									25	OFF	

Total cfm: 189

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-18-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 50.2 in WC

Sparge PSI: 12.4 PSI

SVE Process Flow: 3.0 SCFM

Sparge Temp: 95 °F

Sparge Room Temp: 97 °F

XP Room Temp: 89 °F

Sparge Run Time: 2180

SVE Run Time: 2180

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 178°

PID at TI 101: 34.1 ppm

PID at MID Carbon: 59.6 ppm

PID at EFF Carbon: 48.6 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	4	13	9	4	19	11	3
2	10	5	8	11	4	14	10	4	20	7	4
3	10	4	9	5	4	15	3	4	21	11	4
4	4	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	12	3	17	18	4	23	8	4
6	12	5	12	10	3	18	10	4	24	7	4
									25	OFF	

Total cfm: 189

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-17-17 **Time:** 1411 **Temp:** 74°

SVE Process Vacuum: 49.4 in WC

Sparge PSI: 11.7 PSI

SVE Process Flow: 2.4 SCFM

Sparge Temp: 96 °F

Sparge Room Temp: 96 °F

XP Room Temp: 89 °F

Sparge Run Time: 2156

SVE Run Time: 2156

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 178°

PID at TI 101: 46.3 ppm

PID at MID Carbon: 51.4 ppm

PID at EFF Carbon: 46.1 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	4	13	9	4	19	10	3
2	10	5	8	11	4	14	10	4	20	7	4
3	10	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	5	22	OFF	
5	3	5	11	12	3	17	18	4	23	8	4
6	12	4	12	10	3	18	10	4	24	7	4
									25	OFF	

Total cfm: 187

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-14-17 **Time:** 1300 **Temp:** 79°

SVE Process Vacuum:	48.8	in WC	(Arrival) **System Status:**	ON
Sparge PSI:	11.9	PSI	(Departure) **System Status:**	ON
SVE Process Flow:	2.9	SCFM	**Air Sample Collected:**	yes
Sparge Temp:	102	°F	**Temp at TI 101:**	180°
Sparge Room Temp:	99	°F	**PID at TI 101:**	41.5 ppm
XP Room Temp:	91	°F	**PID at MID Carbon:**	53.2 ppm
Sparge Run Time:	2083		**PID at EFF Carbon:**	51.5 ppm
SVE Run Time:	2083		**Surge Counter:**	NA

	cfm	*psi*		*cfm*	*psi*		*cfm*	*psi*		*cfm*	*psi*
1	2	5	7	3	4	13	9	4	19	11	3
2	10	5	8	11	4	14	10	4	20	7	4
3	10	4	9	5	4	15	3	4	21	11	4
4	4	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	12	3	17	18	4	23	8	4
6	12	5	12	10	3	18	10	4	24	7	4
									25	OFF	

Total cfm: 189

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-13-17 **Time:** 0945 **Temp:** 78°

SVE Process Vacuum: 49.0 in WC

Sparge PSI: 11.5 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 101 °F

Sparge Room Temp: 101 °F set point 150°

XP Room Temp: 93 °F

Sparge Run Time: 2059

SVE Run Time: 2059

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 180°

PID at TI 101: 24.2 ppm

PID at MID Carbon: 20.1 ppm

PID at EFF Carbon: 18.9 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	2	4	13	9	4	19	10	3
2	10	5	8	11	4	14	10	4	20	7	4
3	10	4	9	5	4	15	2	4	21	11	5
4	3	5	10	7	5	16	6	4	22	OFF	
5	2	5	11	12	4	17	18	4	23	8	4
6	12	5	12	10	3	18	10	4	24	7	5
									25	OFF	

Total cfm: 184

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-12-17 **Time:** 0730 **Temp:** 77°

SVE Process Vacuum: 49.2 in WC

Sparge PSI: 11.5 PSI

SVE Process Flow: 2.9 SCFM

Sparge Temp: 101 °F

Sparge Room Temp: 91 °F

XP Room Temp: 84 °F

Sparge Run Time: 2035

SVE Run Time: 2035

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 158°

PID at TI 101: 16.5 ppm

PID at MID Carbon: 15.3 ppm

PID at EFF Carbon: 18.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	5	13	9	4	19	11	4
2	10	5	8	11	4	14	10	4	20	8	4
3	10	4	9	5	4	15	3	4	21	11	4
4	4	5	10	7	5	16	6	5	22	OFF	
5	3	5	11	12	4	17	18	4	23	8	4
6	12	5	12	10	3	18	10	4	24	7	4
									25	OFF	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-11-17 **Time:** _____ **Temp:** 74° overcast.

SVE Process Vacuum: 49.5 in WC

Sparge PSI: 12.3 PSI

SVE Process Flow: 3.1 SCFM

Sparge Temp: 95 °F

Sparge Room Temp: 96 °F

XP Room Temp: 89 °F

Sparge Run Time: 2012

SVE Run Time: 2012

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 174°

PID at TI 101: 23.4 ppm

PID at MID Carbon: 14.3 ppm

PID at EFF Carbon: 20.4 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	5	13	10	4	19	11	4
2	10	5	8	11	4	14	11	4	20	8	4
3	10	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	5	22	OFF	
5	3	4	11	12	4	17	18	4	23	8	4
6	12	5	12	10	3	18	10	4	24	7	5
									25	OFF	

Total cfm: 191.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-10-17 **Time:** _____ **Temp:** 74° overcast

SVE Process Vacuum: 49.9 in WC

Sparge PSI: 12.2 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 96 °F

Sparge Room Temp: 82 °F

XP Room Temp: 80 °F

Sparge Run Time: 1989

SVE Run Time: 1989

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 160

PID at TI 101: 23.2 ppm

PID at MID Carbon: 19.0 ppm

PID at EFF Carbon: 11.8 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	5	13	9	4	19	11	4
2	9	5	8	11	4	14	10	4	20	9	4
3	11	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	5	22	OFF	
5	3	6	11	11	4	17	19	4	23	9	4
6	12	5	12	10	3	18	10	5	24	7	5
									25	OFF	

Total cfm: 189

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-7-17 **Time:** _____ **Temp:** 75° Rain

SVE Process Vacuum: 45.4 in WC

Sparge PSI: 12.5 PSI

SVE Process Flow: 2.6 SCFM

Sparge Temp: 107 °F

Sparge Room Temp: 82 °F

XP Room Temp: 77 °F

Sparge Run Time: 1924

SVE Run Time: 1924

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 160

PID at TI 101: 23.2 ppm

PID at MID Carbon: 19.0 ppm

PID at EFF Carbon: 11.8 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	5	13	9	4	19	11	4
2	9	5	8	11	4	14	10	4	20	9	4
3	11	4	9	5	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	5	22	OFF	
5	3	6	11	11	4	17	19	4	23	9	4
6	12	5	12	10	3	18	10	5	24	7	5
									25	OFF	

Total cfm: 189

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-6-17 **Time:** _____ **Temp:** 74° raining

SVE Process Vacuum: 51.0 in WC

Sparge PSI: 12.1 PSI

SVE Process Flow: 3.0 SCFM

Sparge Temp: 91 °F

Sparge Room Temp: 84 °F

XP Room Temp: 79 °F

Sparge Run Time: 1909

SVE Run Time: 1909

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes.

Temp at TI 101: 152

PID at TI 101: 23.2 ppm

PID at MID Carbon: 19.8 ppm

PID at EFF Carbon: 23.4 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	9	4	19	11	4
2	10	5	8	11	4	14	11	4	20	8	4
3	10	4	9	6	4	15	3	4	21	11	4
4	3	5	10	9	5	16	6	4	22	OFF	
5	2	5	11	12	4	17	18	4	23	9	4
6	12	5	12	10	3	18	10	4	24	7	4
									25	OFF	

Total cfm: 189.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-5-17 **Time:** _____ **Temp:** 76°

SVE Process Vacuum: 50.1 in WC

Sparge PSI: 12.0 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 93 °F

Sparge Room Temp: 86 °F

XP Room Temp: 81 °F

Sparge Run Time: 1885

SVE Run Time: 1885

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 160°

PID at TI 101: 23.2 ppm

PID at MID Carbon: 19.8 ppm

PID at EFF Carbon: 23.4 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	9	4	19	11	4
2	10	5	8	11	4	14	11	4	20	8	4
3	10	4	9	6	4	15	3	4	21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	7	5	11	12	4	17	18	4	23	9	4
6	12	5	12	10	3	18	10	4	24	7	4
									25	OFF	

Total cfm: 189

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-31-17 **Time:** _____ **Temp:** 64°

SVE Process Vacuum: 34.5 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.9 PSI

Sparge Temp: 85 °F

Sparge Room Temp: 80 °F

XP Room Temp: 82 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 1244

SVE Run Time: 2617

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-28-17 **Time:** _____ **Temp:** 77°

SVE Process Vacuum: 20.9 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 94 °F

Sparge Room Temp: 86 °F

XP Room Temp: 87 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: yes.

Sparge Run Time: 1172

SVE Run Time: 2545

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

Spike Shield - surge protective device
Hubbell
www.hubbell-wiring.com
8232-0031A

} reading replace

PID : 0

Last stage : 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-27-17 **Time:** _____ **Temp:** 75°

SVE Process Vacuum: 22.3 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 90 °F

Sparge Room Temp: 86 °F

XP Room Temp: 85 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: Yes

Sparge Run Time: 1148

SVE Run Time: 2521

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : Ø

Last Stage : Ø

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-26-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 22.1 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 88 °F

Sparge Room Temp: 80 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1125

SVE Run Time: 2498

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0

Last Stage : 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-25-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 22.5 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 88 °F

Sparge Room Temp: 90 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 1101

SVE Run Time: 2474

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID ✓

last stage ✓

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-24-17 **Time:** _____ **Temp:** 76°

SVE Process Vacuum: 21.7 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.7 PSI

Sparge Temp: 92 °F

Sparge Room Temp: 91 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1077

SVE Run Time: 2450

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : Ø

LAST Stage : Ø

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-21-17 **Time:** _____ **Temp:** 80°

SVE Process Vacuum: 21.0 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 99 °F

Sparge Room Temp: 95 °F

XP Room Temp: 87 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1004

SVE Run Time: 2377

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0

last stage : 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-20-17 **Time:** _____ **Temp:** 79°

SVE Process Vacuum: 21.3 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 96 °F

Sparge Room Temp: 95 °F

XP Room Temp: 91 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 980

SVE Run Time: 2353

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID: 0.0

Last Stage: 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-19-17 **Time:** _____ **Temp:** 75°

SVE Process Vacuum: 21.2 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 94 °F

Sparge Room Temp: 98 °F

XP Room Temp: 89 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 956

SVE Run Time: 2329

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID: 0.8

last stage: 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-18-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 21.6 in WC

SVE Process Flow: 0.6 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 93 °F

Sparge Room Temp: 95 °F

XP Room Temp: 94 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 932

SVE Run Time: 2305

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0

LAST STAGE : 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-17-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 21.6 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 93 °F

Sparge Room Temp: 96 °F

XP Room Temp: 93 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: yes

Sparge Run Time: 908

SVE Run Time: 2281

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0

last stage : 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-14-17 **Time:** _____ **Temp:** 79°

SVE Process Vacuum: 21.4 in WC

SVE Process Flow: 0.6 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 96 °F

Sparge Room Temp: 96 °F

XP Room Temp: 93 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 836

SVE Run Time: 2209

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : Ø

Last Stage : Ø

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-13-17 **Time:** 0900 **Temp:** 78°

SVE Process Vacuum: 21.5 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 95 °F

Sparge Room Temp: 95 °F

XP Room Temp: 89 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 812

SVE Run Time: 2185

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : ~~0~~

last stage : ~~0~~

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-12-17 **Time:** _____ **Temp:** 77°

SVE Process Vacuum: 22.0 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 94 °F

Sparge Room Temp: 88 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 788

SVE Run Time: 2161

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID. : 0.0

last stage : 0.0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-11-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 21.9 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 92 °F

Sparge Room Temp: 84 °F

XP Room Temp: 82 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 764

SVE Run Time: 2137

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : Ø

last stage : Ø

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-10-17 **Time:** _____ **Temp:** 74° OVERCAST

SVE Process Vacuum: 21.9 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 92 °F

Sparge Room Temp: 84 °F

XP Room Temp: 82 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: YES

Sparge Run Time: 742

SVE Run Time: 2115

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0.5

last stage: 1.0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-7-17 **Time:** _____ **Temp:** 75° Rain

SVE Process Vacuum: 22.1 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 90 °F

Sparge Room Temp: 82 °F

XP Room Temp: 80 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: Yes

Sparge Run Time: 669

SVE Run Time: 2042

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID: 0

last stage: 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-6-17 **Time:** _____ **Temp:** 74° Raining

SVE Process Vacuum: 22.1 in WC

SVE Process Flow: 0.6 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 90 °F

Sparge Room Temp: 82 °F

XP Room Temp: 80 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 645

SVE Run Time: 2018

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : Ø

last stage : Ø

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-5-17 **Time:** _____ **Temp:** 76°

SVE Process Vacuum: 21.8 in WC

SVE Process Flow: 0.6 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 91 °F

Sparge Room Temp: 89 °F

XP Room Temp: 86 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 620

SVE Run Time: 1993

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0.2

~~Last~~ Stage rdg. : 0.4

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-31-17 **Time:** _____ **Temp:** 64°

Total Discharge: 1049169 gal 11091 ÷3

Daily Discharge 3697 gal

AST Pressure: 60.8 in WC

Oxidizer Main Temp: 637.3 °F

Oxidizer High Temp: 615.7 °F

Element Temp: 833 °F

Inf water PH 7.27 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: Yes

Defoamer level: 6 gals.

Room Temp: 68.3 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 367 AST Pump 381 MS Pump 6 hrs.

AST Blower 2003 Outlet Pump 904 GW Pumps #4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-28-17 **Time:** _____ **Temp:** 77°

Total Discharge: 1038078 gal

Daily Discharge 12,389 gal

AST Pressure: 60.1 in WC

Oxidizer Main Temp: 642.4 °F

Oxidizer High Temp: 626.2 °F

Element Temp: 819 °F

Inf water PH 7.38 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: NO

Defoamer level: 8 gals.

Room Temp: 75.6 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 364 AST Pump 378 MS Pump 6

AST Blower 1930 Outlet Pump 894 GW Pumps #4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

replaced the leaking bag filter canister – 7/27/17

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-27-17 **Time:** _____ **Temp:** 75°

Total Discharge: 1025689 gal

Daily Discharge 13,510 gal

AST Pressure: 60.2 in WC

Oxidizer Main Temp: 636.6 °F

Oxidizer High Temp: 619.1 °F

Element Temp: 841 °F

Inf water PH 7.48 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 8 gals.

Room Temp: 73.1 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 360 AST Pump 373 MS Pump 6

AST Blower 1907 Outlet Pump 882 GW Pumps #4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 4-26-17 **Time:** _____ **Temp:** 71°

Total Discharge: 1012179 gal

Daily Discharge 13,793 gal

AST Pressure: 60.7 in WC

Oxidizer Main Temp: 652.7 °F

Oxidizer High Temp: 644.4 °F

Element Temp: 813 °F

Inf water PH 7.45 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .85 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Defoamer level: 71

Room Temp: 69.7 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 356 AST Pump 369 MS Pump 6 hrs.

AST Blower 1883 Outlet Pump 870 GW Pumps #4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-25-17 **Time:** _____ **Temp:** 70°

Total Discharge: 998386 gal

Daily Discharge 14,286 gal

AST Pressure: 59.9 in WC

Oxidizer Main Temp: 651.7 °F

Oxidizer High Temp: 644.8 °F

Element Temp: 835 °F

Inf water PH 7.49 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 6 gals.

Room Temp: 70.8 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 352 AST Pump 364 MS Pump 6 hrs.

AST Blower 1859 Outlet Pump 858 GW Pumps #4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-24-17 **Time:** _____ **Temp:** 76°

Total Discharge: 984100 gal 41440 ÷ 3 **Mag Gauge Flow:** .75 (0.50-1.0)

Daily Discharge 13,813 gal **System Status:** ON (Arrival)

AST Pressure: 59.5 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 658.6 °F

Oxidizer High Temp: 642.9 °F **Sample Collected:** NO

Element Temp: 809 °F **Bag Filters Replaced:** NO

Inf water PH 7.39 pH (7.0-9.0) **Defoamer level:** 6 gals.

Room Temp: 75.5 °F

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI **Surge Counter:** 249

Run Times (hours)

Inlet pump 349 AST Pump 360 MS Pump 6

AST Blower 1838 Outlet Pump 847 GW Pumps #4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

secondary eff. canister leaking

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-21-17 **Time:** _____ **Temp:** 80°

Total Discharge: 942660 gal

Daily Discharge 13,582 gal

AST Pressure: 60.0 in WC

Oxidizer Main Temp: 638.5 °F

Oxidizer High Temp: 643.7 °F

Element Temp: 834 °F

Inf water PH 7.63 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: NO

Defoamer level: 8 gal.

Room Temp: 79.8 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 336 AST Pump 347 MS Pump 6

AST Blower 1762 Outlet Pump 806 GW Pumps #4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-20-17 **Time:** _____ **Temp:** 77°

Total Discharge: 929078 gal

Daily Discharge 13,834 gal ↓437

AST Pressure: 60.0 in WC

Oxidizer Main Temp: 633.6 °F

Oxidizer High Temp: 662.0 °F

Element Temp: 811 [redacted] °F

Inf water PH 7.26 pH
(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75
(0.50-1.0)

System Status: ON
(Arrival)

System Status: ON
(Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Defoamer level: 8 gals.

Room Temp: 78.1 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 332 AST Pump 343 MS Pump 6 hrs

AST Blower 1739 Outlet Pump 793 GW Pumps #4 well pump on.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-19-17 **Time:** 1115 **Temp:** 75°

Total Discharge: 915244 gal

Daily Discharge 14,271 gal ↑ 1022

AST Pressure: 59.8 in WC

Oxidizer Main Temp: 653.4 °F

Oxidizer High Temp: 641.2 °F

Element Temp: 819 °F

Inf water PH 7.34 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 8 gals.

Room Temp: 78 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 328 AST Pump 339 MS Pump 6 hrs

AST Blower 1715 Outlet Pump 780 GW Pumps #4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-18-17 **Time:** 1200 **Temp:** 74°

Total Discharge: 900973 gal

Daily Discharge 13,249 gal ↓1

AST Pressure: 60.4 in WC

Oxidizer Main Temp: 655.8 °F

Oxidizer High Temp: 629.7 °F

Element Temp: 813 °F

Inf water PH 7.11 pH
(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75
(0.50-1.0)

System Status: ON
(Arrival)

System Status: ON
(Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 10 gals.

Room Temp: 75.8 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 323 AST Pump 336 MS Pump 6 hrs.

AST Blower 1691 Outlet Pump 767 GW Pumps # 4 well pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-17-17 **Time:** _____ **Temp:** 74°

Total Discharge: 887724 gal 39752 ÷3

Daily Discharge 13,250. gal

AST Pressure: 60.2 in WC

Oxidizer Main Temp: 635.9 °F

Oxidizer High Temp: 630.8 °F

Element Temp: 795 °F

Inf water PH 7.36 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .85 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 10 gals.

Room Temp: 78 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 320 AST Pump 333 MS Pump 6 hrs.

AST Blower 1669 Outlet Pump 756 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-14-17 **Time:** _____ **Temp:** 79°

Total Discharge: 847972 gal
832234

Daily Discharge 15738 gal

AST Pressure: 59.3 in WC

Oxidizer Main Temp: 649.5 °F

Oxidizer High Temp: 622.6 °F

Element Temp: 808 °F

Inf water PH 7.02 pH
7.36 (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .85 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Defoamer level: 5 gals.

Room Temp: 85 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 308 AST Pump 323 MS Pump 6 hrs

AST Blower 1600 Outlet Pump 721 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-13-17 **Time:** 0845 **Temp:** 78°

Total Discharge: 832234 gal

Daily Discharge 14,727 gal

AST Pressure: 60.4 in WC

Oxidizer Main Temp: 641.7 °F

Oxidizer High Temp: 627.8 °F

Element Temp: 844 °F

Inf water PH 7.36 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 4 gals.

Room Temp: 84 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 303 AST Pump 319 MS Pump 6 hrs.

AST Blower 1573 Outlet Pump 707 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-12-17 **Time:** _____ **Temp:** 77°

Total Discharge: 817507 gal

Daily Discharge 13,615 gal *

AST Pressure: 60.2 in WC

Oxidizer Main Temp: 648.2 °F

Oxidizer High Temp: 670.4 °F

Element Temp: 852 °F

Inf water PH 7.42 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .70 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 5 gals.

Room Temp: _____ °F

Surge Counter: 249

Run Times (hours)

Inlet pump 299 AST Pump 316 MS Pump 6

AST Blower 1548 Outlet Pump 694 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

* eff. filter canister turned off - leaking

R/R Wed 7/12/17 in pm.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-11-17 **Time:** _____ **Temp:** 74°

Total Discharge: 803792 gal

Daily Discharge 12,663 gal

AST Pressure: 59.6 in WC

Oxidizer Main Temp: 640.7 °F

Oxidizer High Temp: 622.2 °F

Element Temp: 789. °F

Inf water PH 7.35 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: yes

Bag Filters Replaced: yes

Defoamer level: 7 gals.

Room Temp: 85 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 295 AST Pump 312 MS Pump 6 hrs.

AST Blower 1523 Outlet Pump 681 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-10-17 **Time:** _____ **Temp:** 74° overcast.

Total Discharge: 79 1129 gal 40887 ÷3

Daily Discharge 13,629 gal

AST Pressure: 60.2 in WC

Oxidizer Main Temp: 653.1 °F

Oxidizer High Temp: 639.4 °F

Element Temp: 860 °F

Inf water PH 8.19 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 10 gals.

Room Temp: 75 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 291 AST Pump 309 MS Pump 6

AST Blower 1501 Outlet Pump 670 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-7-17 **Time:** _____ **Temp:** 75° Rain

Total Discharge: 150242 gal

Daily Discharge 13,830 gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: 857 °F

Inf water PH 8.18 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75 (0.50-1.0)

System Status: OFF (Arrival)

System Status: ON (Departure)

Sample Collected: yes

Bag Filters Replaced: yes

Defoamer level: full

Room Temp: 70 °F

Surge Counter: 249

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

Lost electric on Thursday – got power back Fri. 10AM.

Troubles with computer at cell 2

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-6-17 **Time:** _____ **Temp:** 74° Raining

Total Discharge: 735281 gal

Daily Discharge 14,961 gal

AST Pressure: 61.5 in WC

Oxidizer Main Temp: 652.2 °F

Oxidizer High Temp: 690.2 °F

Element Temp: 842 °F

Inf water PH 8.12 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 7 gals.

Room Temp: 72.5 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 273 AST Pump 295 MS Pump 6

AST Blower 1404 Outlet Pump 621 GW Pumps # 4 was is ON

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-5-17 **Time:** _____ **Temp:** 76°

Total Discharge: 720320 gal 70525 ÷5 **Mag Gauge Flow:** .75 (0.50-1.0)

Daily Discharge 14,105 gal **System Status:** ON (Arrival)

AST Pressure: 60.5 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 641.8 °F

Oxidizer High Temp: 643.2 °F **Sample Collected:** No

Element Temp: 800 °F **Bag Filters Replaced:** yes

Inf water PH 7.20 pH (7.0-9.0) **Defoamer level:** 6 gals.

Room Temp: 72.3 °F

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI **Surge Counter:** 249

Run Times (hours)

Inlet pump 269 AST Pump 291 MS Pump 6

AST Blower 1379 Outlet Pump 608 GW Pumps #4 well on.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-31-17 **Time:** _____ **Temp:** 64°

SVE Process Vacuum: 38.1 in WC

Sparge PSI: 7.6 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 78.2 °F

Control Room Temp: 51 °F

XP Room Temp: 55 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2548

Sparge Run Time: 2522

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-28-17 **Time:** _____ **Temp:** 77°

SVE Process Vacuum: 41.5 in WC

Sparge PSI: 9.2 PSI

SVE Process Flow: 1.3 IN H20

Sparge Temp: 88.9 °F

Control Room Temp: 57 °F

XP Room Temp: 59 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 2476

Sparge Run Time: 2450

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-27-17 **Time:** _____ **Temp:** 75°

SVE Process Vacuum: 39.0 in WC

Sparge PSI: 8.4 PSI

SVE Process Flow: 1.2 IN H20

Sparge Temp: 84.8 °F

Control Room Temp: 54 °F

XP Room Temp: 59 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2452

Sparge Run Time: 2426

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-26-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 36.8 in WC

Sparge PSI: 7.9 PSI

SVE Process Flow: 1.0 IN H20

Sparge Temp: 82.7 °F

Control Room Temp: 54 °F

XP Room Temp: 57 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2428

Sparge Run Time: 2403

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-25-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 39.0 in WC

Sparge PSI: 7.5 PSI

SVE Process Flow: 0.9 IN H20

Sparge Temp: 82.6 °F

Control Room Temp: 53 °F

XP Room Temp: 57 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 2404

Sparge Run Time: 2379

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-24-17 **Time:** _____ **Temp:** 76°

SVE Process Vacuum: 42.4 in WC

Sparge PSI: 8.1 PSI

SVE Process Flow: 0.9 IN H20

Sparge Temp: 87.6 °F

Control Room Temp: 56 °F

XP Room Temp: 59 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2380

Sparge Run Time: 2355

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-21-17 **Time:** _____ **Temp:** 80°

SVE Process Vacuum: 39.5 in WC

Sparge PSI: 8.6 PSI

SVE Process Flow: 0.9 IN H20

Sparge Temp: 93.6 °F

Control Room Temp: 59 °F

XP Room Temp: 62 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2308

Sparge Run Time: 2282

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-20-17 **Time:** _____ **Temp:** 79°

SVE Process Vacuum: 38.8 in WC

Sparge PSI: 9.8 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 84.2 °F

Control Room Temp: 57 °F

XP Room Temp: 60 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2284

Sparge Run Time: 2258

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-19-17 **Time:** _____ **Temp:** 75°

SVE Process Vacuum: 38.2 in WC

Sparge PSI: 8.9 PSI

SVE Process Flow: 1.1 IN H20

Sparge Temp: 90.0 °F

Control Room Temp: 57 °F

XP Room Temp: 60 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2262

Sparge Run Time: 2249

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-18-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 38.0 in WC

Sparge PSI: 9.1 PSI

SVE Process Flow: 1.2 IN H20

Sparge Temp: 86.9 °F

Control Room Temp: 56 °F

XP Room Temp: 58 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2238

Sparge Run Time: 2225

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-17-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 39.3 in WC

Sparge PSI: 8.5 PSI

SVE Process Flow: 1.1 IN H20

Sparge Temp: 88.9 °F

Control Room Temp: 57 °F

XP Room Temp: 59 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2214

Sparge Run Time: 2214

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-14-17 **Time:** _____ **Temp:** 79°

SVE Process Vacuum: 38.5 in WC

Sparge PSI: 9.0 PSI

SVE Process Flow: 1.2 IN H20

Sparge Temp: 90.4 °F

Control Room Temp: 58 °F

XP Room Temp: 60 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2141

Sparge Run Time: 2141

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-13-17 **Time:** _____ **Temp:** 78°

SVE Process Vacuum: 39.0 in WC

Sparge PSI: 9.1 PSI

SVE Process Flow: 1.1 IN H20

Sparge Temp: 89.9 °F

Control Room Temp: 57 °F

XP Room Temp: 59 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2117

Sparge Run Time: 2117

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-12-17 **Time:** _____ **Temp:** 77°

SVE Process Vacuum: 38.2 in WC

Sparge PSI: 9.1 PSI

SVE Process Flow: 1.2 IN H20

Sparge Temp: 89.6 °F

Control Room Temp: 57 °F

XP Room Temp: 60 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2094

Sparge Run Time: 2094

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-11-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 39.3 in WC

Sparge PSI: 9.0 PSI

SVE Process Flow: 1.2 IN H20

Sparge Temp: 88.2 °F

Control Room Temp: 56 °F

XP Room Temp: 59 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2070

Sparge Run Time: 2070

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-10-17 **Time:** _____ **Temp:** 74° overcast.

SVE Process Vacuum: 38.0 in WC

Sparge PSI: 8.9 PSI

SVE Process Flow: 1.3 IN H20

Sparge Temp: 87.2 °F

Control Room Temp: 56 °F

XP Room Temp: 59 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 2048

Sparge Run Time: 2048

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-7-17 **Time:** _____ **Temp:** 75° Rain

SVE Process Vacuum: 39.4 in WC

Sparge PSI: 9.7 PSI

SVE Process Flow: 1.1 IN H20

Sparge Temp: 101 °F

Control Room Temp: 63 °F

XP Room Temp: 67 °F

System Status: OFF (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 1982

Sparge Run Time: 1982

Maintenance Work Performed, Adjustments Made and Comments:

lost electric - came back on 10 AM 7/12/17.

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-6-17 **Time:** _____ **Temp:** 74° Raining

SVE Process Vacuum: 38.3 in WC

Sparge PSI: 8.6 PSI

SVE Process Flow: 1.2 IN H20

Sparge Temp: 84.3 °F

Control Room Temp: 55 °F

XP Room Temp: 57 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 1968

Sparge Run Time: 1967

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-5-17 **Time:** _____ **Temp:** 76°

SVE Process Vacuum: 37.5 in WC

Sparge PSI: 8.8 PSI

SVE Process Flow: 1.2 IN H20

Sparge Temp: 86.0 °F

Control Room Temp: 56 °F

XP Room Temp: 58 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 1943

Sparge Run Time: 1942

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-31-17 **Time:** _____ **Temp:** 64°

Total Discharge: 13124453 Gal 58467 ÷3

Daily Discharge: 19,489 Gal

AST Pressure: 57.1 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 77 °F

AST water PH 7.79 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: 1.90 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 9 #

Surge Counter: 25,177

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 1537 Outlet Pump 1689 Booster Blower 2789

AST Blower 2789 MS Pump 1240 Aeration Blower —

AST Pump 974 Dual Phase 2521

Maintenance Work Performed, Adjustments Made and Comments:

50 stroke
355 disp. rate
60 defoamer

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-28-17 **Time:** _____ **Temp:** 77°

Total Discharge: 13065986 Gal

Daily Discharge: 14,663 Gal

AST Pressure: 55.2 in WC

Dual Phase Vacuum: 20.2 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 85 °F

AST water PH 7.80 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: 1.55 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 9 #

Surge Counter: 25,177

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 1505 Outlet Pump 1660 Booster Blower 2717

AST Blower 2717 MS Pump 1215 Aeration Blower —

AST Pump 953 Dual Phase 2449

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-27-17 **Time:** 0745 **Temp:** 75°

Total Discharge: 13051323 Gal

Daily Discharge: 12,243 Gal

AST Pressure: 55.9 in WC

Dual Phase Vacuum: 19.7 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 82 °F

AST water PH 7.17 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: 1.90 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 9 #

Surge Counter: 25,177

Remaining Defoamer: 8 gals. added 5 gals.

Run Times

Inlet Pump 1497 Outlet Pump 1653 Booster Blower 2693

AST Blower 2694 MS Pump 1208 Aeration Blower —

AST Pump 947 Dual Phase 2426

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-26-17 **Time:** _____ **Temp:** 71°

Total Discharge: 13039080 Gal

Daily Discharge: 20,850 Gal

AST Pressure: 56.9 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 81 °F

AST water PH 8.42 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: 1.90 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 9 #

Surge Counter: 25,177

Remaining Defoamer: _____

Run Times

Inlet Pump 1490 Outlet Pump 1647 Booster Blower 2669

AST Blower 2670 MS Pump 1203 Aeration Blower —

AST Pump 943 Dual Phase 2402

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-25-17 **Time:** _____ **Temp:** 40°

Total Discharge: 13018230 Gal

Daily Discharge: 19,798 Gal

AST Pressure: 55.9 in WC

Dual Phase Vacuum: 20.6 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 80 °F

AST water PH 8.48 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 34 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 12 #

Surge Counter: 25,177

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 1479 Outlet Pump 1636 Booster Blower 2645

AST Blower 2646 MS Pump 1194 Aeration Blower —

AST Pump 935 Dual Phase 2378

Maintenance Work Performed, Adjustments Made and Comments:

359 pulse
50 STROKE

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 1-24-17 **Time:** _____ **Temp:** 76°

Total Discharge: 12998432 Gal 64048 ÷3

Daily Discharge: 21,349 Gal

AST Pressure: 54.7 in WC

Dual Phase Vacuum: 20.5 in WC

Dual Phase Temp: 84 °F

XP Room Temp: 79 °F

AST water PH 8.57 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 34 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 12 #

Surge Counter: 25,177

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 1468

Outlet Pump 1627

Booster Blower 2621

AST Blower 2622

MS Pump 1185

Aeration Blower —

AST Pump 928

Dual Phase 2354

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-21-17 **Time:** 0800 **Temp:** 80°

Total Discharge: 12934384 Gal

Daily Discharge: 21,847 Gal

AST Pressure: 54.6 in WC

Dual Phase Vacuum: 20.7 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 90 °F

AST water PH 0800 11.14 1500 8.18 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 34 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 12 #

Surge Counter: 25,177

Remaining Defoamer: 8 gal.

Run Times

Inlet Pump 1420 Outlet Pump 1598 Booster Blower 2549

AST Blower 2550 MS Pump 1157 Aeration Blower —

AST Pump 905 Dual Phase 2282

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-20-17 **Time:** _____ **Temp:** 79°

Total Discharge: 12912537 Gal

Daily Discharge: 22,906 Gal ↑

AST Pressure: 54.2 in WC

Dual Phase Vacuum: 20.8 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 87 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 34 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 12 #

Surge Counter: 25,177

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 1420 Outlet Pump 1588 Booster Blower 2525

AST Blower 2526 MS Pump 1147 Aeration Blower —

AST Pump 897 Dual Phase 2258

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-19-17 **Time:** _____ **Temp:** 75°

Total Discharge: 12889631 Gal

Daily Discharge: 22,377 Gal

AST Pressure: 55.5 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 86 °F

AST water PH 0900 6.80 8.18 1400 (*) pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 38 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: _____

Cartridge Filters Replaced: ~~15~~

Remianing Cartridge 15 #

Surge Counter: 25,177

Remaining Defoamer: 8 gals

Run Times

Inlet Pump 1408 Outlet Pump 1577 Booster Blower 2501

AST Blower 2502 MS Pump 1137 Aeration Blower —

AST Pump 889 Dual Phase 2234

Maintenance Work Performed, Adjustments Made and Comments:

* adjusting the acid pump to operate in our range of 7.0 - 9.0

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-18-17 **Time:** _____ **Temp:** 74°

Total Discharge: 12867254 Gal

Daily Discharge: 23,079 Gal

AST Pressure: 54.1 in WC

Dual Phase Vacuum: 20.8 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 86 °F

AST water PH 8.63 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 42 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 19 #

Surge Counter: 25,177

Remaining Defoamer: 9 gals.

Run Times

Inlet Pump 1395

Outlet Pump 1566

Booster Blower 2479

AST Blower 2479

MS Pump 1127

Aeration Blower —

AST Pump 880

Dual Phase 2211

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-17-17 **Time:** _____ **Temp:** 74°

Total Discharge: 12844175 Gal 70231 ÷3

Daily Discharge: 23,410 Gal

AST Pressure: 55.1 in WC

Dual Phase Vacuum: 20.6 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 86 °F

AST water PH 1000 5.31 | 1400 8.60 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 42 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 19 #

Surge Counter: 25,177

Remaining Defoamer: 9 gals.

Run Times

Inlet Pump 1382 Outlet Pump 1553 Booster Blower 2455

AST Blower 2455 MS Pump 1117 Aeration Blower —

AST Pump 872 Dual Phase 2188

Maintenance Work Performed, Adjustments Made and Comments:

20
995

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-14-17 **Time:** _____ **Temp:** 79°

Total Discharge: 12773944 Gal

Daily Discharge: 23,689 Gal

AST Pressure: 55.9 in WC

Dual Phase Vacuum: 20.6 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 87 °F

AST water PH 0700 3.20 | 1.83 1430 30/1000 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 42 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 19 #

Surge Counter: 25,177

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 1342 Outlet Pump 1513 Booster Blower 2385

AST Blower 2386 MS Pump 1086 Aeration Blower —

AST Pump 846 Dual Phase 2118

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-13-17 **Time:** _____ **Temp:** 78°

Total Discharge: 12750255 Gal

Daily Discharge: 18,746 Gal *

AST Pressure: 53.7 in WC

Dual Phase Vacuum: 19.4 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 87 °F

AST water PH 6.82 pH(7.0-9.0)
6.89

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 22 #

Surge Counter: 25,177

Remaining Defoamer: 9 gals.

Run Times

Inlet Pump 1329 Outlet Pump 1500 Booster Blower 2363

AST Blower 2364 MS Pump 1075 Aeration Blower —

AST Pump 837 Dual Phase 2096

Maintenance Work Performed, Adjustments Made and Comments:

* Cell shut down on daylite turn to make repairs.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-12-17 **Time:** _____ **Temp:** 77°

Total Discharge: 12731509 Gal

Daily Discharge: 26,088 Gal

AST Pressure: 54.5 in WC

Dual Phase Vacuum: 21.4 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 87 °F

AST water PH 12.14 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 22 #

Surge Counter: 25,177

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 1317 Outlet Pump 1490 Booster Blower 2338

AST Blower 2338 MS Pump 1067 Aeration Blower —

AST Pump 830 Dual Phase 2072

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-11-17 **Time:** _____ **Temp:** 74°

Total Discharge: 12705421 Gal

Daily Discharge: 23,537 Gal

AST Pressure: 54.3 in WC

Dual Phase Vacuum: 20.9 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 85 °F

AST water PH 7.1 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 22 #

Surge Counter: 25,177

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 1302 Outlet Pump 1474 Booster Blower 2316

AST Blower 2315 MS Pump 1056 Aeration Blower —

AST Pump 821 Dual Phase 2050

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-10-17 **Time:** _____ **Temp:** 74° overcast.

Total Discharge: 12681884 Gal 78553 ÷3

Daily Discharge: 26,184 Gal

AST Pressure: 56.7 in WC

Dual Phase Vacuum: 20.5 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 84 °F

AST water PH 8.48 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 50

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 1291 Outlet Pump 1459 Booster Blower 2293

AST Blower 2292 MS Pump 1045 Aeration Blower —

AST Pump 812 Dual Phase 2027

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-7-17 **Time:** _____ **Temp:** 75° rain

Total Discharge: 12603331 Gal

Daily Discharge: 26,446 Gal

AST Pressure: 54.7 in WC

Dual Phase Vacuum: 20.9 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 83 °F

AST water PH 8.84 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 50 #

Surge Counter: 25,177

Remaining Defoamer: full

Run Times

Inlet Pump 1254

Outlet Pump 1411

Booster Blower 2220

AST Blower 2219

MS Pump 1011

Aeration Blower —

AST Pump 783

Dual Phase 1954

Maintenance Work Performed, Adjustments Made and Comments:

filled the acid drum 7/7/17

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-6-17 **Time:** _____ **Temp:** 74° raining

Total Discharge: 12576885 Gal

Daily Discharge: 26,919 Gal

AST Pressure: 56.1 in WC

Dual Phase Vacuum: 20.5 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 83 °F

AST water PH 7.84 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 36 #

Mag Gauge Flow: 1.90 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 5 #

Surge Counter: 25,177

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 1242 Outlet Pump 1395 Booster Blower 2196

AST Blower 2195 MS Pump 999 Aeration Blower —

AST Pump 774 Dual Phase 1930

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-5-17 **Time:** 0730 **Temp:** 76°

Total Discharge: 12549966 Gal 98364 ÷5

Daily Discharge: 19,672 Gal

AST Pressure: 55.2 in WC

Dual Phase Vacuum: 20.5 in WC

Dual Phase Temp: 99 °F

XP Room Temp: 81 °F

AST water PH 8.18 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 40 #

Mag Gauge Flow: 1.90 (1.50-2.00)

System Status: OFF (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 5 #

Surge Counter: 25,177

Remaining Defoamer: 9 gals.

Run Times

Inlet Pump 1229 Outlet Pump 1379 Booster Blower 2174

AST Blower 2173 MS Pump 987 Aeration Blower —

AST Pump 764 Dual Phase 1908

Maintenance Work Performed, Adjustments Made and Comments:

Main circuit breaker tripped on SAT. 7/3/17.

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7-31-17 Time: 1000 Temp: 80

System Status: On Discharge Water Total: 278924

Generator Status: On # of Active Wells: 11

Generator Hours: 2463 Bag Filters Changed: N

Vacuum IN Hg: 10.8 Generator Fuel Level: Full

DPT 101: 0 Carroll Fuel Tank Level: 1/2 full

DPT 102: 0.95 Product Drum Level: 15 Gallons

Blower Temperature: 200 Product Tank Measurement: (Weekly)

Blower Outlet PSI: 22 Product Transfer Pump Cycles: 14

Blower Hours (B-101): 1190 P-101 Hours: 165

Arrival:	T1: 339	T2: 328	T3: 360
Departure:	T1: 350	T2: 353	T3: 371

Additional Notes/ Maintenance Performed

- Added 160 G. fuel.
- Adjusted blower tubing. Cracked again when blower kicked on.
- Sol. Online - 2, 7, 11, 18, 20, 21, 25, 31, 35, 40, 42
  168, 163, 162, 155, 153, 152, 143, 138, 134, 147, 138

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/28/17 Time: 0845 Temp: 75

System Status: On

Generator Status: On

Generator Hours: 2456

Vacuum IN Hg: 10.5

DPT 101: 0.05

DPT 102: 0.85

Blower Temperature: 225

Blower Outlet PSI: 22

Blower Hours (B-101): 1183

Discharge Water Total: 278924

# of Active Wells: 8

Bag Filters Changed: N

Generator Fuel Level: Full Reserve

Carroll Fuel Tank Level: 3/4

Product Drum Level: 15 Gallons

Product Tank Measurement: (Weekly)

Product Transfer Pump Cycles: 14

P-101 Hours: 165

Arrival:	T1: 350	T2: 352	T3: 368
Departure:	T1: 350	T2: 357	T3: 372

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/27/17 Time: 0845 Temp: 70°

System Status: On

Generator Status: On

Generator Hours: 2432

Vacuum IN Hg: 11.1

DPT 101: 0

DPT 102: 0.85

Blower Temperature: 225

Blower Outlet PSI: 22

Blower Hours (B-101): 1159

Discharge Water Total: 278924

# of Active Wells: 8

Bag Filters Changed: N

Generator Fuel Level: 1/2 Res.

Carroll Fuel Tank Level: Full

Product Drum Level: 15 Gallons

Product Tank Measurement: 464.3 Gallons
(Weekly)

Product Transfer Pump Cycles: 14

P-101 Hours: 165

Arrival:	T1: 350	T2: 357	T3: 374
Departure:	T1:	T2:	T3:

Additional Notes/ Maintenance Performed

- Solenoids online - 118, 21-23, 31, 35, 37, 41, 42
- All cleared.

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/26/17 Time: 0845 Temp: 75°

System Status: On Discharge Water Total: 278,671

Generator Status: On # of Active Wells: 7

Generator Hours: 2408 Bag Filters Changed: N

Vacuum IN Hg: 11.1 Generator Fuel Level: 1/4 Mark

DPT 101: 0 Carroll Fuel Tank Level: Full

DPT 102: 0.85 Product Drum Level: 15 G

Blower Temperature: 225 Product Tank Measurement: (Weekly)

Blower Outlet PSI: 22 Product Transfer Pump Cycles: 14

Blower Hours (B-101): 1135 P-101 Hours: 165

Arrival: T1: 350 T2: 362 T3: 377

Departure: T1: T2: T3:

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/25/17 Time: 0915 Temp: 75°

System Status: On

Generator Status: On

Generator Hours: 2385

Vacuum IN Hg: 7.5

DPT 101: 0.05

DPT 102: 0.95

Blower Temperature: 210

Blower Outlet PSI: 24

Blower Hours (B-101): 1112

Discharge Water Total: 278136

# of Active Wells: ~~17~~ 9

Bag Filters Changed: Y

Generator Fuel Level: Full

Carroll Fuel Tank Level: Full

Product Drum Level: 15 Gallons

Product Tank Measurement: (Weekly)

Product Transfer Pump Cycles: 14

P-101 Hours: ~~1112~~ /64

Arrival:	T1: 350	T2: 361	T3: 377
Departure:	T1: 350	T2: 405	T3: 414

Additional Notes/ Maintenance Performed

- Greased Blower

~~Solenoids - 122, 118~~

Wells on line - 152, 150, 151, 144, 135*, 134, 155*

Main line - 153, 162, 163, 168, 169, 138, 143 - 7

* - clog in line.

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/24/17 Time: 0830 Temp: 75°

System Status: On Discharge Water Total: 278136

Generator Status: On # of Active Wells: 17

Generator Hours: 2361 Bag Filters Changed: N

Vacuum IN Hg: 9.3 Generator Fuel Level: Full

DPT 101: 0.05 Carroll Fuel Tank Level: 1/4

DPT 102: 0.75 Product Drum Level: 15 Gallons

Blower Temperature: 250 Product Tank Measurement: (Weekly)

Blower Outlet PSI: 19 Product Transfer Pump Cycles: 14

Blower Hours (B-101): 1087 P-101 Hours: 164

Arrival:	T1: 350	T2: 358	T3: 375
Departure:	T1: 350	T2: 357	T3: 374

T – 143 – 144 – 146* – 146*

Additional Notes/ Maintenance Performed

– Added 150 Gallons of fuel

Well #	Solenoid	Well #	Solenoid
128	9 ✗	150	23 ✓
166	6 ✓	146*	~~10~~, 37 ✓
161	12 ✓	140	33 ✗
155	18 ✓	134	38 ✓
157	17 ✓	138	40 ✗
		143	31 ✓

Well #	Solenoid
128	10
155	18
150	23
140	33 ✗
134	38
138	

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/21/17 Time: 1020 Temp: 85°

System Status: On Discharge Water Total: 277888

Generator Status: On # of Active Wells: 17

Generator Hours: 2291 Bag Filters Changed: Y

Vacuum IN Hg: 9.1 Generator Fuel Level: Full

DPT 101: 0.1 Carroll Fuel Tank Level: 1/2

DPT 102: 0.8 Product Drum Level: 15 Gal

Blower Temperature: 255 Product Tank Measurement: (Weekly)

Blower Outlet PSI: 18 Product Transfer Pump Cycles: 14

Blower Hours (B-101): 1017 P-101 Hours: 164

Arrival:	T1: 350	T2: 360	T3: 376
Departure:	T1: 350	T2: 358	T3: 375

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/20/17 Time: 0945 Temp: 80°

System Status: On

Generator Status: On

Generator Hours: 2267

Vacuum IN Hg: 9.6

DPT 101: 0.15

DPT 102: 0.80

Blower Temperature: 245

Blower Outlet PSI: 20

Blower Hours (B-101): 992

Discharge Water Total: 277391

# of Active Wells: 17

Bag Filters Changed: N

Generator Fuel Level: 1/2 Res.

Carroll Fuel Tank Level: Full

Product Drum Level: 15 Gallons

Product Tank Measurement: (Weekly)

Product Transfer Pump Cycles: 14

P-101 Hours: 164

Arrival:	T1: 350	T2: 361	T3: 377
Departure:	T1: 350	T2: 362	T3: 378

Additional Notes/ Maintenance Performed

-Greased Blower + Added 175 Gallons of fuel

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/19/17 Time: 0930 Temp: 78°

System Status: On

Generator Status: On

Generator Hours: 2243

Vacuum IN Hg: ~~2243~~ 9.6

DPT 101: 0.15

DPT 102: 0.80

Blower Temperature: 245

Blower Outlet PSI: 20

Blower Hours (B-101): 968

Discharge Water Total: 277133

# of Active Wells: 13

Bag Filters Changed: N

Generator Fuel Level: Full

Carroll Fuel Tank Level: Main 1/3 Full

Product Drum Level: 35 Gallon

Product Tank Measurement: (Weekly)

Product Transfer Pump Cycles: 13

P-101 Hours: 163

Arrival:	T1: 350	T2: 371	T3: 385
Departure:	T1: 350	T2: 371	T3: 384

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/18/17 Time: 1020 Temp: 78

System Status: On

Generator Status: On

Generator Hours: 2220

Vacuum IN Hg: 10.2

DPT 101: 0.3

DPT 102: 0.8

Blower Temperature: 240

Blower Outlet PSI: 22

Blower Hours (B-101): 945

Discharge Water Total: 276068

# of Active Wells: 13

Bag Filters Changed: N

Generator Fuel Level: Full

Carroll Fuel Tank Level: ~~4/4~~ Full

Product Drum Level: 25 6

Product Tank Measurement: (Weekly)

Product Transfer Pump Cycles: 13

P-101 Hours: 162

Arrival:	T1: 350	T2: 380	T3: 390
Departure:	T1: 350	T2: 418	T3: 417

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date:	7-17-17	Time: 0900	Temp: 78°
System Status:	On	Discharge Water Total:	276068
Generator Status:	On	# of Active Wells:	17
Generator Hours:	2199	Bag Filters Changed:	N
Vacuum IN Hg:	10.4	Generator Fuel Level:	F
DPT 101:	0.45	Carroll Fuel Tank Level:	1/4
DPT 102:	0.80	Product Drum Level:	25 G
Blower Temperature:	270	Product Tank Measurement: (Weekly)	
Blower Outlet PSI:	18	Product Transfer Pump Cycles:	13
Blower Hours (B-101):	924	P-101 Hours:	162

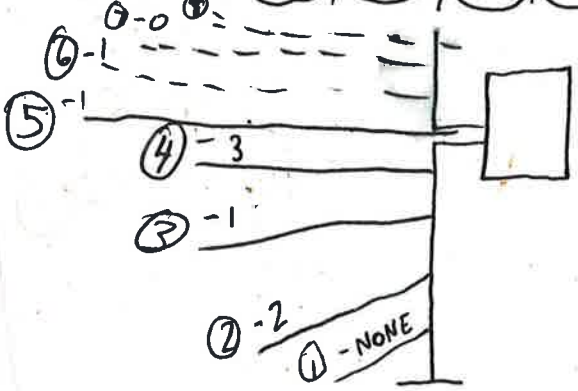
Arrival:	T1: 350	T2: 369	T3: 380
Departure:	T1: 350	T2: 379	T3: 391

Additional Notes/Maintenance Performed

2nd 2nd 3rd 4 4 4 5 6 7-8 L

169, 170, 168, 128, 166, 161, 162, 155, 157, 158, 149, 151, 146, 140, 134

-Main line: 152, 153, 162, 163, 168, 169, 138, 143



Well #	Solenoids	Well #	Sole	Well #	Solenoid
*134	38 ✓	153	20 ✓	163	7 ✓
146	37 ✓	*155	18 ✓	168	2 ✓
143	31 ✓	157	17 ✓	169	1 ✓
149	29 ✓	158	16 ✓	170	3 ✓
152	21 ✓	*162	11 ✓	128	9
151	22 ✓	166	6 ✓	*140	33
		*161	12 ✓		

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7-14-17 Time: 1500 Temp: 88°

System Status: On Discharge Water Total: 275805

Generator Status: On # of Active Wells: 16

Generator Hours: 2195 Bag Filters Changed: Y

Vacuum IN Hg: 8.4 Generator Fuel Level: Full

DPT 101: 0.2 Carroll Fuel Tank Level: 1/3

DPT 102: ~~1.0~~ 0.75 Product Drum Level: 25 Gallons

Blower Temperature: 250 Product Tank Measurement: 441

(Weekly)

Blower Outlet PSI: 16 Product Transfer Pump Cycles: 13

Blower Hours (B-101): 921 P-101 Hours: 162

Arrival:	T1: 350	T2: 397	T3: 407
Departure:	T1: 350	T2: 380	T3: 401

Additional Notes/ Maintenance Performed

Sol - 1, 2, 6, 8, 11, 20, 21, 23, 25, 29, 31, 34, 35, 36, 38, 41

- Turned off for the weekend
- Added 150 Gallons of fuel to Generator
- Greased the Blower + changed bag filters
- Will look into low vacuum on Monday

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/13/17 Time: 0830 Temp: 81°

System Status: On

Generator Status: On

Generator Hours: 2165

Vacuum IN Hg: 10.4

DPT 101: 0.2

DPT 102: 1.0

Blower Temperature: 210

Blower Outlet PSI: 26

Blower Hours (B-101): 890

Discharge Water Total: 274806

# of Active Wells: 15

Bag Filters Changed: N

Generator Fuel Level: 15/16 Full Reserve

Carroll Fuel Tank Level: 2/3 Full

Product Drum Level: 20 Gallons

Product Tank Measurement: (Weekly)

Product Transfer Pump Cycles: 13

P-101 Hours: 160

Arrival:	T1: ~~[illegible]~~ 350	T2: 410	T3: 418
Departure:	T1: 350	T2: 420	T3: 434

Additional Notes/ Maintenance Performed

Well	(Sol)		
134	(40)	148	(8)
138	(38)	149	(~~34~~)(25)
135	(35)		

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/12/17 Time: 1100 Temp: 83°

System Status: On Discharge Water Total: 272874

Generator Status: On # of Active Wells: 15

Generator Hours: 2143 Bag Filters Changed: N

Vacuum IN Hg: 10.5 Generator Fuel Level: Main 3/4 Full

DPT 101: 0.25 Carroll Fuel Tank Level: 2/3 Full

DPT 102: 1.0 Product Drum Level: ~15 Gallons

Blower Temperature: 210 Product Tank Measurement: (Weekly)

Blower Outlet PSI: 28 Product Transfer Pump Cycles: 13

Blower Hours (B-101): 868 P-101 Hours: 158

Arrival:	T1: 350	T2: 413	T3: 420
Departure:	T1: 350	T2: 421	T3: 432

Additional Notes/ Maintenance Performed

- Added 180 Gallons of Fuel

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7-11-17 Time: 1140 Temp: 72°

System Status: On Discharge Water Total: 270924

Generator Status: On # of Active Wells: 15

Generator Hours: 2120 Bag Filters Changed: N

Vacuum IN Hg: 10.8 Generator Fuel Level: 7/8 Reserve

DPT 101: 0.3 Carroll Fuel Tank Level: Full

DPT 102: 1.0 Product Drum Level: ~ 32 Gallons

Blower Temperature: 210 Product Tank Measurement: 412 G

(Weekly)

Blower Outlet PSI: 28 Product Transfer Pump Cycles: 12

Blower Hours (B-101): 845 P-101 Hours: 155

Arrival: T1: 350 T2: 424 T3: 428

Departure: T1: 350 T2: 427 T3: 429

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/10/17 Time: 0815 Temp: 70°

System Status: On Discharge Water Total: 268965

Generator Status: On # of Active Wells: 16

Generator Hours: 2093 Bag Filters Changed: Y

Vacuum IN Hg: 10.4 Generator Fuel Level: Empty but still running

DPT 101: 0.3 *Carroll Fuel Tank Level: 1/4 Full, now empty

DPT 102: 1.0 Product Drum Level: 30 Gallons

Blower Temperature: 210 Product Tank Measurement: (Weekly)

Blower Outlet PSI: 28 Product Transfer Pump Cycles: 12

Blower Hours (B-101): 818 P-101 Hours: ~~152~~ 153

Arrival:	T1: 350	T2: 415	T3: 422
Departure:	T1: 350	T2: 421	T3: 433

Additional Notes/ Maintenance Performed

*- Ordered Fuel.

↳ - Filled @ 1430: Carrol Tank + Generator

- Greased Blower motor
- Changed bag filters
- Adjusted Stingers
- Dip Product tank tomorrow.

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/7/17 Time: 1215 Temp: 73°

System Status: On Discharge Water Total: 265195

Generator Status: On # of Active Wells: 15

Generator Hours: 2026 Bag Filters Changed: Y

Vacuum IN Hg: 7.2 VI 145: 12.5 Generator Fuel Level: 1/2 Reserve

DPT 101: 0.35 Carroll Fuel Tank Level: 1/2 Full

DPT 102: 0.90 Product Drum Level: 32 Gallons

Blower Temperature: 220 Product Tank Measurement: (Weekly)

Blower Outlet PSI: 22 Product Transfer Pump Cycles: 11

Blower Hours (B-101): 750 P-101 Hours: 148

Arrival:	T1: 350	T2: 404	T3: 413
Departure:	T1: 373	T2: 540	T3: 527

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/6/17 Time: 1100 Temp: 70

System Status: On

Generator Status: On

Generator Hours: 2001

Vacuum IN Hg: 10.0

DPT 101: 0.5

DPT 102: 1.0

Blower Temperature: 200

Blower Outlet PSI: 28

Blower Hours (B-101): 725

Discharge Water Total: 264408

# of Active Wells: 15

Bag Filters Changed: N

Generator Fuel Level: 1/8 Main

Carroll Fuel Tank Level: 1/2 Full

Product Drum Level: ~25 G

Product Tank Measurement: (Weekly)

Product Transfer Pump Cycles: 11

P-101 Hours: 147

Arrival:	T1: 350	T2: 412	T3: 419
Departure:	T1: 350	T2: 359	T3: 358

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 7/5/17 Time: 1000 Temp: 72°

System Status: On

Generator Status: On

Generator Hours: 1976

Vacuum IN Hg: 9

DPT 101: 0.55

DPT 102: 1.20

Blower Temperature: 175

Blower Outlet PSI: 32

Blower Hours (B-101): 700

Discharge Water Total: 263219

# of Active Wells: 15

Bag Filters Changed: Y

Generator Fuel Level: Full

Carroll Fuel Tank Level: 1/2

Product Drum Level: 25 Gallons

Product Tank Measurement: (Weekly)

Product Transfer Pump Cycles: 11

P-101 Hours: 146

Arrival:	T1: ~~4~~ 350	T2: 449	T3: 466
Departure:	T1: 346	T2: 439	T3: 451

Additional Notes/ Maintenance Performed

- Changed Bag Filters
- Greased Blower
- Black Vac Hose has hole near oxidizer. Needs replacement.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-31-17 **Time:** _____ **Temp:** 66°

SVE Process Vacuum: 68.0 in WC

Sparge PSI: 12.6 PSI

SVE Process Flow: 3.4 SCFM

Sparge Temp: 87 °F

Sparge Room Temp: 82 °F

XP Room Temp: 74° °F

Sparge Run Time: 2746

SVE Run Time: 2746

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 172°

PID at TI 101: 2.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	4	5	13	9	4	19	12	4
2	9	5	8	11	4	14	10	4	20	7	5
3	11	5	9	5	4	15	OFF		21	10	4
4	3	5	10	5.5	5	16	6	5	22	OFF	
5	4	5	11	11	4	17	17	4	23	7	4
6	10	5	12	14	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 182.5

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-30-17 **Time:** _____ **Temp:** 61°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

Sparge Run Time: _____

SVE Run Time: _____

(Arrival) **System Status:** _____

(Departure) **System Status:** _____

Air Sample Collected: _____

Temp at TI 101: _____

PID at TI 101: _____ ppm

PID at MID Carbon: _____ ppm

PID at EFF Carbon: _____ ppm

Surge Counter: _____

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

No Power – Trade Point planned outage

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-29-17 **Time:** _____ **Temp:** 66° rain

SVE Process Vacuum: 69.9 in WC

Sparge PSI: 13.5 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 76 °F

Sparge Room Temp: 79 °F

XP Room Temp: 73 °F

Sparge Run Time: 2722

SVE Run Time: 2722

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 174°

PID at TI 101: 10.7 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: N/A

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	5	2	7	3	5	13	9	4	19	13	5
2	9	5	8	10	5	14	10	5	20	7	5
3	10	5	9	5	5	15	3	5	21	10	5
4	4	5	10	8	5	16	6	5	22	OFF	
5	3	5	11	11	4	17	16	5	23	7	5
6	11	5	12	10	4	18	10	5	24	7	5
									25	OFF	

Total cfm: 187

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-28-17 **Time:** _____ **Temp:** 63°

SVE Process Vacuum: 70.3 in WC

Sparge PSI: 12.8 PSI

SVE Process Flow: 3.9 SCFM

Sparge Temp: 74 °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

Sparge Run Time: 2716

SVE Run Time: 2716

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: _____

PID at TI 101: _____ ppm

PID at MID Carbon: _____ ppm

PID at EFF Carbon: _____ ppm

Surge Counter: _____

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Power outage over the weekend - TPA

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-24-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

Sparge Run Time: _____

SVE Run Time: _____

(Arrival) **System Status:** OFF

(Departure) **System Status:** OFF *

Air Sample Collected: _____

Temp at TI 101: _____

PID at TI 101: _____ ppm

PID at MID Carbon: _____ ppm

PID at EFF Carbon: _____ ppm

Surge Counter: _____

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

(*) No electric to the system. — planned outage by trade point

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-23-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

Sparge Run Time: _____

SVE Run Time: _____

(Arrival) **System Status:** OFF

(Departure) **System Status:** OFF *

Air Sample Collected: _____

Temp at TI 101: _____

PID at TI 101: _____ ppm

PID at MID Carbon: _____ ppm

PID at EFF Carbon: _____ ppm

Surge Counter: _____

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

(*) No electric to the system. — planned outage by trade point

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-22-17 **Time:** 0930 **Temp:** 73°

SVE Process Vacuum: 65.7 in WC

Sparge PSI: 12.0 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 92 °F

Sparge Room Temp: 93 °F

XP Room Temp: 86 °F

Sparge Run Time: 2708

SVE Run Time: 2708

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 194°

PID at TI 101: 6.7 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: N/A

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	5	13	9	4	19	13	4
2	9	5	8	11	5	14	10	5	20	7	5
3	10	5	9	5	5	15	OFF		21	10	5
4	3	6	10	7	5	16	6	5	22	OFF	
5	3	5	11	11	4	17	17	5	23	7	5
6	11	5	12	10	4	18	9	5	24	7	5
									25	OFF	

Total cfm: 180

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-21-17 **Time:** _____ **Temp:** 72°

SVE Process Vacuum: 67.1 in WC

Sparge PSI: 12.5 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 87 °F

Sparge Room Temp: 85 °F

XP Room Temp: 78 °F

Sparge Run Time: 2690

SVE Run Time: 2690

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 126°

PID at TI 101: 11.7 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: N/A

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	5	2	7	3	5	13	9	4	19	13	5
2	9	5	8	11	5	14	10	5	20	7	5
3	10	5	9	5	5	15	3	5	21	10	5
4	4	5	10	8	5	16	6	5	22	OFF	
5	3	5	11	11	4	17	16	5	23	7	5
6	11	5	12	10	4	18	10	5	24	7	5
									25	OFF	

Total cfm: 188

Maintenance Work Performed, Adjustments Made and Comments:

System back up from the electrical outage.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-18-17 **Time:** _____ **Temp:** 78°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ SCFM

Sparge Temp: _____ °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

Sparge Run Time: 2683

SVE Run Time: 2683

(Arrival) **System Status:** OFF

(Departure) **System Status:** OFF (*)

Air Sample Collected: _____

Temp at TI 101: _____

PID at TI 101: _____ ppm

PID at MID Carbon: _____ ppm

PID at EFF Carbon: _____ ppm

Surge Counter: _____

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

8/17/17 04:30 pm SVE VFD FAULT alarm.
We changed the set points
(*) Trade Point cut the power for an outage.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8/17/17 **Time:** 0830 **Temp:** 75

SVE Process Vacuum: 63.3 in WC

Sparge PSI: 12.5 PSI

SVE Process Flow: 3.4 SCFM

Sparge Temp: 96 °F

Sparge Room Temp: 95 °F

XP Room Temp: 97 °F

Sparge Run Time: 2677

SVE Run Time: 2677

(Arrival) **System Status:** On

(Departure) **System Status:** On

Air Sample Collected: N

Temp at TI 101: 190.

PID at TI 101: 20.2 ppm

PID at MID Carbon: 0.4 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: \

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	6	7	0	5	13	9	4	19	12	4
2	9	5	8	11	4	14	10	5	20	6	5
3	16	5	9	5	5	15	0	5	21	10	5
4	0	6	10	7	5	16	6	5	22	0	0
5	0	5	11	11	4	17	16	5	23	6	4
6	11	5	12	10	3	18	9	5	24	6	5
									25	0	3

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-16-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 66.9 in WC

Sparge PSI: 12.7 PSI

SVE Process Flow: 3.4 SCFM

Sparge Temp: 89 °F

Sparge Room Temp: 85 °F

XP Room Temp: 78 °F

Sparge Run Time: 2651

SVE Run Time: 2651

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 176°

PID at TI 101: 11.7 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	5	2	7	3	5	13	9	4	19	13	5
2	9	5	8	11	5	14	10	5	20	7	5
3	10	5	9	5	5	15	3	5	21	10	5
4	4	5	10	8	5	16	6	5	22	OFF	
5	3	5	11	11	4	17	16	5	23	7	5
6	11	5	12	10	4	18	10	5	24	7	5
									25	OFF	

Total cfm: 188

Maintenance Work Performed, Adjustments Made and Comments:

8/16 Need some new SCFM/air gauges – excessive bubbling inside the gauges.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-15-17 **Time:** 0930 **Temp:** 74°

SVE Process Vacuum: 64.2 in WC

Sparge PSI: 11.8 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 92 °F

Sparge Room Temp: 85 °F

XP Room Temp: 80 °F

Sparge Run Time: 2626

SVE Run Time: 2626

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 174°

PID at TI 101: 5.9 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	6	5	7	3	5	13	9	4	19	10	4
2	9	5	8	11	5	14	5	10	20	7	5
3	11	5	9	5	5	15	5	3	21	11	5
4	3	6	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	17	5	23	8	5
6	12	5	12	10	4	18	10	5	24	7	5
									25	OFF	

Total cfm: 180

Maintenance Work Performed, Adjustments Made and Comments:

Weed worked around the carbon tanks and the CFM/psi gauges.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-14-17 **Time:** _____ **Temp:** 69°

SVE Process Vacuum:	62.7	in WC	(Arrival) **System Status:**	OFF	
Sparge PSI:	11.8	PSI	(Departure) **System Status:**	ON	
SVE Process Flow:	3.5	SCFM	**Air Sample Collected:**	yes	
Sparge Temp:	96	°F	**Temp at TI 101:**	187°	
Sparge Room Temp:	87	°F	**PID at TI 101:**	8.0	ppm
XP Room Temp:	84	°F	**PID at MID Carbon:**	0.0	ppm
Sparge Run Time:	2609		**PID at EFF Carbon:**	0.0	ppm
SVE Run Time:	2609		**Surge Counter:**	NA	

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	1	5	7	3	5	13	9	4	19	10	4
2	9	5	8	11	5	14	5	10	20	7	5
3	11	5	9	5	5	15	5	3	21	11	5
4	3	6	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	17	5	23	8	5
6	12	5	12	10	4	18	10	5	24	7	5
									25	OFF	

Total cfm: 180

Maintenance Work Performed, Adjustments Made and Comments:

high pressure discharge alarm set point min. −2 max. +2 set at 1 } Nes reset the alarm points

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-11-17 **Time:** _____ **Temp:** 72°

SVE Process Vacuum: 66.8 in WC

Sparge PSI: 12.0 PSI

SVE Process Flow: 3.4 SCFM

Sparge Temp: 91 °F

Sparge Room Temp: 90 °F

XP Room Temp: 86 °F

Sparge Run Time: 2583

SVE Run Time: 2583

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes.

Temp at TI 101: 184°

PID at TI 101: 6.4 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: N/A.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	1	5	7	3	5	13	9	4	19	10	4
2	9	5	8	11	5	14	5	10	20	7	5
3	11	5	9	5	5	15	5	3	21	11	5
4	3	6	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	17	5	23	8	5
6	12	5	12	10	4	18	10	5	24	7	5
									25	OFF	

Total cfm: 183

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-10-17 **Time:** _____ **Temp:** 65°

SVE Process Vacuum:	54.2	in WC	(Arrival) **System Status:**	OFF	
Sparge PSI:	13.6	PSI	(Departure) **System Status:**	ON	
SVE Process Flow:	2.4	SCFM	**Air Sample Collected:**	Yes	
Sparge Temp:	82	°F	**Temp at TI 101:**	195	
Sparge Room Temp:	94	°F	**PID at TI 101:**	9.4	ppm
XP Room Temp:	86	°F	**PID at MID Carbon:**	—	ppm
Sparge Run Time:	2560		**PID at EFF Carbon:**	0.2	ppm
SVE Run Time:	2560		**Surge Counter:**	NA	

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	5	7	>0	5	13	9	4	19	12	4
2	10	5	8	11	4	14	10	4	20	8	4
3	10	4	9	5	4	15	0	4	21	10	4
4	0	5	10	7	5	16	7	5	22	0	0
5	0	5	11	11	3	17	16	4	23	7	4
6	11	5	12	10	3	18	8	5	24	6	5
									25	0	2

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

- Middle Carbon sample port clogged w/ insect.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-9-17 **Time:** _____ **Temp:** 69°

SVE Process Vacuum: 54.1 in WC

Sparge PSI: 12.7 PSI

SVE Process Flow: 2.6 SCFM

Sparge Temp: 87 °F

Sparge Room Temp: 78 °F

XP Room Temp: 80 °F

Sparge Run Time: 2545

SVE Run Time: 2545

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 160

PID at TI 101: 1.0 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: \

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	5	7	0	5	13	9	4	19	12	3
2	10	5	8	11	4	14	10	4	20	8	5
3	10	4	9	5	4	15	0	4	21	10	4
4	0	6	10	7	5	16	6	5	22	0	0
5	0	5	11	11	4	17	17	4	23	8	4
6	11	5	12	10	2	18	9	5	24	6	5
									25	0	3

Total cfm: 170

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-8-17 **Time:** 1425 **Temp:** 69°

SVE Process Vacuum: 53.5 in WC

Sparge PSI: 12.7 PSI

SVE Process Flow: 2.8 SCFM

Sparge Temp: 85 °F

Sparge Room Temp: 86 °F

XP Room Temp: 85 °F

Sparge Run Time: 2521

SVE Run Time: 2521

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 164°

PID at TI 101: 1.5 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	5	13	9	4	19	12	4
2	9	>5	8	11	4	14	10	5	20	8	5
3	10	>5	9	5	4	15	3	4	21	11	5
4	3	<5	10	7	5	16	6	5	22	OFF	
5	3	5	11	11	4	17	17	4	23	7	5
6	12	5	12	10	3	18	9	5	24	7	5
									25	OFF	

Total cfm: 185

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-7-17 **Time:** 0900 **Temp:** 70°

SVE Process Vacuum: 52.3 in WC

Sparge PSI: 12.6 PSI

SVE Process Flow: 2.6 SCFM

Sparge Temp: 88 °F

Sparge Room Temp: 74 °F

XP Room Temp: 72 °F

Sparge Run Time: 2506

SVE Run Time: 2506

(Arrival) **System Status:** OFF

(Departure) **System Status:** O.

Air Sample Collected: N

Temp at TI 101: 140°

PID at TI 101: ppm

PID at MID Carbon: ppm

PID at EFF Carbon: ppm

Surge Counter: \

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	6	7	0	5	13	9	5	19	10	4
2	8	5	8	10	5	14	10	5	20	8	5
3	11	5	9	4	5	15	0	5	21	11	5
4	<5	6	10	7	5	16	5	5	22	0	0
5	<5	5	11	10	4	17	18	5	23	8	5
6	12	5	12	10	3	18	10	5	24	6	5
									25	0	0

Total cfm: 177

Maintenance Work Performed, Adjustments Made and Comments:

- SVE VFD Fault Alarm @ 0330 8/6/17

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-4-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 51.8 in WC

Sparge PSI: 12.1 PSI

SVE Process Flow: 2.6 SCFM

Sparge Temp: 92 °F

Sparge Room Temp: 89 °F

XP Room Temp: 83 °F

Sparge Run Time: 2460

SVE Run Time: 2460

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes.

Temp at TI 101: 164°

PID at TI 101: 3.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	1	5	7	3	5	13	9	4	19	10	4
2	9	5	8	11	5	14	10	5	20	7	5
3	11	5	9	5	5	15	3	5	21	11	5
4	3	6	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	17	5	23	8	5
6	12	5	12	10	4	18	10	5	24	7	5
									25	OFF.	

Total cfm: 183

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-3-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 52.8 in WC

Sparge PSI: 13.0 PSI

SVE Process Flow: 2.6 SCFM

Sparge Temp: 88 °F

Sparge Room Temp: 93 °F

XP Room Temp: 87 °F

Sparge Run Time: 2437

SVE Run Time: 2437

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 176°

PID at TI 101: 7.0 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	1	5	7	3	5	13	9	4	19	10	4
2	9	5	8	11	5	14	10	5	20	7	5
3	11	5	9	5	5	15	3	5	21	11	5
4	3	6	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	12	5	23	8	5
6	12	5	12	10	4	18	10	5	24	7	5
									25	OFF	

Total cfm: 183

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-2-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 51.5 in WC

Sparge PSI: 13.0 PSI

SVE Process Flow: 2.6 SCFM

Sparge Temp: 91 °F

Sparge Room Temp: 90 °F

XP Room Temp: 86 °F

Sparge Run Time: 2412

SVE Run Time: 2412

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: -

PID at TI 101: - ppm

PID at MID Carbon: - ppm

PID at EFF Carbon: - ppm

Surge Counter: NA

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	
						25	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Carbons have been changed out.
system back in service 12:30 08-02-17.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-1-17 **Time:** _____ **Temp:** 69°

SVE Process Vacuum: 51.4 in WC

Sparge PSI: 12.6 PSI

SVE Process Flow: 2.6 SCFM

Sparge Temp: 93 °F

Sparge Room Temp: 87 °F

XP Room Temp: 82 °F

Sparge Run Time: 2395

SVE Run Time: 2395

(Arrival) **System Status:** ON

(Departure) **System Status:** OFF * 0615 hrs.

Air Sample Collected: NO

Temp at TI 101: —

PID at TI 101: — ppm

PID at MID Carbon: — ppm

PID at EFF Carbon: — ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	✓		7	✓		13	✓		19	✓	
2	✓		8	✓		14	✓		20	✓	
3	✓		9	✓		15	✓		21	✓	
4	✓		10	✓		16	✓		22	✓	
5	✓		11	✓		17	✓		23	✓	
6	✓		12	✓		18	✓		24	✓	
									25	✓	

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

* scheduled maintenance – change out the carbon

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-31-17 **Time:** _____ **Temp:** 66°

SVE Process Vacuum: 38.3 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.9 PSI

Sparge Temp: 83 °F

Sparge Room Temp: 79 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 1760

SVE Run Time: 3133

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

PID: ~~0~~

last stage: ~~0~~

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-30-17 **Time:** _____ **Temp:** 61°

SVE Process Vacuum: 37.5 in WC

SVE Process Flow: 0.6 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 78 °F

Sparge Room Temp: 89 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 1736

SVE Run Time: 3109

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-29-17 **Time:** _____ **Temp:** 66° rain

SVE Process Vacuum: 47.3 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.8 PSI

Sparge Temp: 74 °F

Sparge Room Temp: 77 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes.

Sparge Run Time: 1713

SVE Run Time: 3086

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-28-17 **Time:** _____ **Temp:** 63°

SVE Process Vacuum: 45.2 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 75 °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1709

SVE Run Time: 3082

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

TPA power outage over the weekend.

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-24-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: _____ in WC

SVE Process Flow: _____ SCFM

Sparge PSI: _____ PSI

Sparge Temp: _____ °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

SVE Run Time: _____

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

* No electric to the system. - planned outage by tradepoint.

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-23-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: _____ in WC

SVE Process Flow: _____ SCFM

Sparge PSI: _____ PSI

Sparge Temp: _____ °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: _____

Sparge Run Time: _____

SVE Run Time: _____

Surge Counter: _____

Maintenance Work Performed, Adjustments Made and Comments:

* No electric to the system. - planned outage by tradepoint.

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-22-17 **Time:** _____ **Temp:** 73°

SVE Process Vacuum: 37.5 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 91 °F

Sparge Room Temp: 94 °F

XP Room Temp: 88 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1701

SVE Run Time: 3074

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

PID: Ø

Last Stage: Ø

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-21-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 41.1 in WC

SVE Process Flow: 0.7 SCFM

Sparge PSI: 4.7 PSI

Sparge Temp: 85 °F

Sparge Room Temp: 95 °F

XP Room Temp: 93 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1677

SVE Run Time: 3050

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-18-17 **Time:** _____ **Temp:** 78°

SVE Process Vacuum: 36.5 in WC

SVE Process Flow: 0.6 SCFM

Sparge PSI: 4.9 PSI

Sparge Temp: 95 °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 1675

SVE Run Time: 3048

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0

LAST stage : 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8/17/17 **Time:** 0850 **Temp:** 75

SVE Process Vacuum: 31.8 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.7 PSI

Sparge Temp: 96 °F

Sparge Room Temp: 91 °F

XP Room Temp: 93 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 1654

SVE Run Time: 3027

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-16-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 36.7 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.7 PSI

Sparge Temp: 90 °F

Sparge Room Temp: 78 °F

XP Room Temp: 80 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1628

SVE Run Time: 3001

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID: 0

Last Stage: 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-15-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 36.2 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 92 °F

Sparge Room Temp: 76 °F

XP Room Temp: 78 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: yes

Sparge Run Time: 1603

SVE Run Time: 2976

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-14-17 **Time:** _____ **Temp:** 69°

SVE Process Vacuum: 38.5 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 89 °F

Sparge Room Temp: 72 °F

XP Room Temp: 75 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 1580

SVE Run Time: 2953

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID: ~~0~~

Last Stage: ~~0~~

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-11-17 **Time:** _____ **Temp:** 72°

SVE Process Vacuum: 38.0 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 88 °F

Sparge Room Temp: 54 °F

XP Room Temp: 58 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1507

SVE Run Time: 2880

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0

Last Stage : 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-10-17 **Time:** _____ **Temp:** 65°

SVE Process Vacuum: 34.9 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 86 °F

Sparge Room Temp: 80 °F

XP Room Temp: 82 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 1483

SVE Run Time: 2856

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-9-17 **Time:** _____ **Temp:** 69°

SVE Process Vacuum: 38.0 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 85 °F

Sparge Room Temp: 76 °F

XP Room Temp: 72 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes.

Sparge Run Time: 1459

SVE Run Time: 2832

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-8-17 **Time:** _____ **Temp:** 69°

SVE Process Vacuum: 36.4 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 86 °F

Sparge Room Temp: 75 °F

XP Room Temp: 73 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes.

Sparge Run Time: 1435

SVE Run Time: 2808

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-7-17 **Time:** 0840 **Temp:** 75°

SVE Process Vacuum: 37.0 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.8 PSI

Sparge Temp: 87 °F

Sparge Room Temp: 69 °F

XP Room Temp: 67 °F

System Status: On (Arrival)

System Status: On (Departure)

Air Sample Collected: N

Sparge Run Time: 1413

SVE Run Time: 2786

Surge Counter:

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-4-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 37.4 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.9 PSI

Sparge Temp: 92 °F

Sparge Room Temp: 95 °F

XP Room Temp: 97 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes.

Sparge Run Time: 1338

SVE Run Time: 2711

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-3-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 37.5 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.8 PSI

Sparge Temp: 90 °F

Sparge Room Temp: 94 °F

XP Room Temp: 98 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

Sparge Run Time: 1315

SVE Run Time: 2688

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-2-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 37.0 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.7 PSI

Sparge Temp: 90 °F

Sparge Room Temp: 90 °F

XP Room Temp: 93 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1291

SVE Run Time: 2664

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

PID : 0

Last Stage : 0

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-1-17 **Time:** _____ **Temp:** 69°

SVE Process Vacuum: 39.2 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.7 PSI

Sparge Temp: 88 °F

Sparge Room Temp: 85 °F

XP Room Temp: 86 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 1266

SVE Run Time: 2639

Surge Counter: 322

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-31-17 **Time:** 0730 **Temp:** 66°

Total Discharge: 127353 gal

Daily Discharge 22,924 gal

AST Pressure: 59.3 in WC

Oxidizer Main Temp: 650.0 °F

Oxidizer High Temp: 601.4 °F

Element Temp: 802 °F

Inf water PH 7.46 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: full 12 gals.

Room Temp: 70° °F

Surge Counter: 280

Run Times (hours)

Inlet pump 37 AST Pump 33 MS Pump 0

AST Blower 137 Outlet Pump 120 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-30-17 **Time:** _____ **Temp:** 61°

Total Discharge: 104429 gal

Daily Discharge 22,620 gal

AST Pressure: 60.6 in WC

Oxidizer Main Temp: 641.9 °F

Oxidizer High Temp: 592.2 °F

Element Temp: 788 °F

Inf water PH 7.30 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.65 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: 6 gals.

Room Temp: 83 °F

Surge Counter: 280

Run Times (hours)

Inlet pump 30 AST Pump 25 MS Pump 0

AST Blower 113 Outlet Pump 98 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-29-17 **Time:** _____ **Temp:** 63° rain

Total Discharge: 81809 gal

Daily Discharge 18,389 gal

AST Pressure: 59.2 in WC

Oxidizer Main Temp: 646.2 °F

Oxidizer High Temp: 602.4 °F

Element Temp: 781 °F

Inf water PH 7.29 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 6 gals.

Room Temp: 77 °F

Surge Counter: 280

Run Times (hours)

Inlet pump 24 AST Pump 18 MS Pump 0

AST Blower 89 Outlet Pump 76 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-28-17 **Time:** _____ **Temp:** 63°

Total Discharge: 63409 gal

Mag Gauge Flow: 1.0 (0.50-1.0)

Daily Discharge _____ gal

System Status: OFF (Arrival)

AST Pressure: _____ in WC

System Status: ON (Departure)

Oxidizer Main Temp: 567 °F

Oxidizer High Temp: 566 °F

Sample Collected: _____

Element Temp: 800 °F

Bag Filters Replaced: _____

Inf water PH _____ pH (7.0-9.0)

Defoamer level: 8 gals.

Room Temp: _____ °F

Inf Bag Filter DP: 0|0 PSI

Eff Bag Filter DP: 0|0 PSI

Surge Counter: 280

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

No power

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-24-17 **Time:** _____ **Temp:** 70°

Total Discharge: 63409 gal

Daily Discharge 8756 gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Inf water PH _____ pH (7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Mag Gauge Flow: OFF (0.50-1.0)

System Status: OFF (Arrival)

System Status: _____ (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Defoamer level: _____

Room Temp: _____ °F

Surge Counter: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

(A) No electric to the system - planned outage by tradepoint.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-23-17 **Time:** _____ **Temp:** 70°

Total Discharge: 63409 gal

Daily Discharge 8756 gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Inf water PH _____ pH (7.0-9.0)

f Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Mag Gauge Flow: OFF (0.50-1.0)

System Status: OFF (Arrival)

System Status: _____ (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Defoamer level: _____

Room Temp: _____ °F

Surge Counter: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

(*) No electric to the system - planned outage by tradepoint.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-22-17 **Time:** 1040 **Temp:** 73°

Total Discharge: 54653 gal

Daily Discharge 16,958 gal

AST Pressure: 59.5 in WC

Oxidizer Main Temp: 646.1 °F

Oxidizer High Temp: 655.2 °F

Element Temp: 813 °F

Inf water PH 7.35 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: 7 gals.

Room Temp: 73.1 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 16 AST Pump 12 MS Pump 0

AST Blower 62 Outlet Pump 51 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-21-17 **Time:** 1100 **Temp:** 74°

Total Discharge: 37634 gal

Daily Discharge 6 gal (*)

AST Pressure: 57.1 in WC

Oxidizer Main Temp: 648.4 °F

Oxidizer High Temp: 623.2 °F

Element Temp: 813 °F

Inf water PH 7.33 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: OFF (*) (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Defoamer level: 8 gals.

Room Temp: 85 °F

Surge Counter: 249.

Run Times (hours)

Inlet pump 11 AST Pump 8 MS Pump 0

AST Blower 45 Outlet Pump 35 GW Pumps #4 well is on

Maintenance Work Performed, Adjustments Made and Comments:

(*) system off for the weekend for power outage by Trade Paint electrical.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-18-17 **Time:** _____ **Temp:** _____

Total Discharge: 35640 gal

Daily Discharge 17265 gal

AST Pressure: 58.0 in WC

Oxidizer Main Temp: 652.6 °F

Oxidizer High Temp: 678.0 °F

Element Temp: _____ °F

Inf water PH _____ pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: Yes.

Defoamer level: 8 gals.

Room Temp: 75.3 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 10 AST Pump 8 MS Pump 0

AST Blower 43 Outlet Pump 33 GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8/17/17 **Time:** 0835 **Temp:** 75°

Total Discharge: 18375 gal

Daily Discharge _____ gal

AST Pressure: 60.0 in WC

Oxidizer Main Temp: 629.9 °F

Oxidizer High Temp: 625.9 °F

Element Temp: 856 °F

Inf water PH 7.25 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 0.90 (0.50-1.0)

System Status: On (Arrival)

System Status: On (Departure)

Sample Collected: N

Bag Filters Replaced: N

Defoamer level: 9 Gal.

Room Temp: 72 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 5 AST Pump 4 MS Pump 0

AST Blower 23 Outlet Pump 17 GW Pumps \

Maintenance Work Performed, Adjustments Made and Comments:

- AS High Level alarm goes off → Outlet Tank High Level.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-16-17 **Time:** _____ **Temp:** 71°

Total Discharge: 1050409 gal

Daily Discharge _____ gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Inf water PH _____ pH
(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Mag Gauge Flow: OFF
(0.50-1.0)

System Status: OFF
(Arrival)

System Status: _____
(Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Defoamer level: _____

Room Temp: _____ °F

Surge Counter: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

Reprogram computer 8/16/17.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-15-17 **Time:** _____ **Temp:** 74°

Total Discharge: 1050409 gal

Daily Discharge — gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Inf water PH _____ pH (7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Defoamer level: _____

Room Temp: _____ °F

Surge Counter: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

NES flying in 8/16/17 to reprogram the computer.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-14-17 **Time:** _____ **Temp:** 69°

Total Discharge: 1050409 gal

Daily Discharge — gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Inf water PH _____ pH (7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Defoamer level: _____

Room Temp: _____ °F

Surge Counter: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

Computer is to be reprogrammed by NES Wednesday. 8/16/17

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-11-17 **Time:** _____ **Temp:** 72°

Total Discharge: 1050409 gal

Daily Discharge — gal

AST Pressure: _____ in WC

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Element Temp: _____ °F

Inf water PH _____ pH (7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Defoamer level: _____

Room Temp: _____ °F

Surge Counter: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

Computer out of service - NES working on
will be here Wed 8/16/17 to re-program the computer

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-10-17 **Time:** _____ **Temp:** 65°

Total Discharge: 1050409 gal

Daily Discharge — gal

AST Pressure: 59.4 in WC

Oxidizer Main Temp: 633.6 °F

Oxidizer High Temp: 613.3 °F

Element Temp: 868 °F

Inf water PH 7.45 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OF (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: FULL

Room Temp: 68.2 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 368 AST Pump 393 MS Pump 6 hrs.

AST Blower 2093 Outlet Pump 904 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

replaced the ground water pumps at cell 4.
computer went out — system down —

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-9-17 **Time:** _____ **Temp:** 69°

Total Discharge: 1,050,409 gal

Daily Discharge 0 gal

AST Pressure: 60.1 in WC

Oxidizer Main Temp: 650 °F

Oxidizer High Temp: 629 °F

Element Temp: 824 °F

Inf water PH 8.22 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: Y

Bag Filters Replaced: N

Defoamer level: Full

Room Temp: 65 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 368 AST Pump 393 MS Pump 6

AST Blower 2072 Outlet Pump 904 GW Pumps ✓

Maintenance Work Performed, Adjustments Made and Comments:

replaced the stripper pump.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-8-17 **Time:** _____ **Temp:** 69°

Total Discharge: 1050409 gal

Daily Discharge _____ gal

AST Pressure: 57.9 in WC

Oxidizer Main Temp: 641.6 °F

Oxidizer High Temp: 608.3 °F

Element Temp: _____ °F

Inf water PH _____ pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: _____

Room Temp: 70.0 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 368 AST Pump 392 MS Pump 6 hrs.

AST Blower 2051 Outlet Pump 904 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

3 stripper pump bad –

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-7-17 **Time:** 0830 **Temp:** 75°

Total Discharge: 1,050,333 gal

Mag Gauge Flow: _____ (0.50-1.0)

Daily Discharge _____ gal

System Status: Off (Arrival)

AST Pressure: _____ in WC

System Status: Off (Departure)

Oxidizer Main Temp: _____ °F

Oxidizer High Temp: _____ °F

Sample Collected: N

Element Temp: _____ °F

Bag Filters Replaced: N

Inf water PH _____ pH (7.0-9.0)

Defoamer level: _____

Room Temp: _____ °F

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Surge Counter: _____

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

- System is down. In process of fixing issue of water traveling from AS to bag filters.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-4-17 **Time:** _____ **Temp:** 71°

Total Discharge: 1050332 gal

Daily Discharge — gal

AST Pressure: 58.1 in WC

Oxidizer Main Temp: 634.6 °F

Oxidizer High Temp: 619.5 °F

Element Temp: 803 °F

Inf water PH 7.54 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.65 (0.50-1.0)

System Status: ON (Arrival)

System Status: OFF (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: _____

Room Temp: 74.4 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 368 AST Pump 381 MS Pump 6 hrs.

AST Blower 2025 Outlet Pump 904 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

PID : Ø

Last Stage : Ø

repair completed 8-3-17
started system 8-4-17
0700

* flow problem coming off of the air stripper pump.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-3-17 **Time:** _____ **Temp:** 71°

Total Discharge: 1050332 gal

Daily Discharge 0 gal

AST Pressure: 0 in WC

Oxidizer Main Temp: 638.0 °F

Oxidizer High Temp: 618.3 °F

Element Temp: 831 °F

Inf water PH 7.79 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) OFF

System Status: (Departure) ON (*)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 6 gals

Room Temp: 86 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 367 AST Pump 381 MS Pump 6 hrs.

AST Blower 2006 Outlet Pump 904 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

need inlet transfer pump. – replaced; system back on 1030 hrs. (*)

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-2-17 **Time:** _____ **Temp:** 71°

Total Discharge: 1050332 gal

Daily Discharge 163 gal *

AST Pressure: 0 in WC

Oxidizer Main Temp: 653.0 °F

Oxidizer High Temp: 615.9 °F

Element Temp: _____ °F

Inf water PH _____ pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF. (Arrival)

System Status: OFF (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 7 gals.

Room Temp: 86.9 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 367 AST Pump 381 MS Pump 6 hrs.

AST Blower 2006 Outlet Pump 904 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

8/1 inlet pump has a bad pump or motor - keeps tripping the breaker.

8/2 removed the pump. to evaluate.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-1-17 **Time:** _____ **Temp:** 69°

Total Discharge: 1050169 gal

* **Daily Discharge** 1000 gal

AST Pressure: 0 in WC

Oxidizer Main Temp: 641.1 °F

Oxidizer High Temp: 625.9 °F

Element Temp: 293 °F

Inf water PH 7.41 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: OFF * (Arrival)

System Status: OFF (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: _____

Room Temp: 71.8 °F

Surge Counter: 249

Run Times (hours)

Inlet pump 367 AST Pump 381 MS Pump 6 hrs.

AST Blower 2005 Outlet Pump 904 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

* system shut down – inlet transfer pump seal went bad; scheduled to change the pump out on 8-1-17 AM. installed new pump/mtr. keeps tripping the breaker.

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-31-17 **Time:** _____ **Temp:** 66°

SVE Process Vacuum: 37.1 in WC

Sparge PSI: 10.2 PSI

SVE Process Flow: 1.4 IN H20

Sparge Temp: 90.7 °F

Control Room Temp: 57 °F

XP Room Temp: 63 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: —

Sparge Run Time: —

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-30-17 **Time:** _____ **Temp:** 61°

SVE Process Vacuum: 37.1 in WC

Sparge PSI: 10.2 PSI

SVE Process Flow: 1.4 IN H20

Sparge Temp: 90.7 °F

Control Room Temp: 57 °F

XP Room Temp: 63 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 3043

Sparge Run Time: 3017

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-29-17 **Time:** _____ **Temp:** 63° rain

SVE Process Vacuum: 34.3 in WC

Sparge PSI: 9.0 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 76.2 °F

Control Room Temp: 51 °F

XP Room Temp: 53 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 3035

Sparge Run Time: 3009

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-28-17 **Time:** 0700 **Temp:** 63°

SVE Process Vacuum: 37.3 in WC

Sparge PSI: 9.6 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 67.8 °F

Control Room Temp: 48° °F

XP Room Temp: 48° °F

System Status: OFF (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 3012

Sparge Run Time: 2986

Maintenance Work Performed, Adjustments Made and Comments:

TPA planned power outage

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-24-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ IN H20

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

* No electric to the system. – planned outage by Tradepoint.

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-23-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: _____ in WC

Sparge PSI: _____ PSI

SVE Process Flow: _____ IN H20

Sparge Temp: _____ °F

Control Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: OFF (Arrival)

System Status: OFF (Departure)

Air Sample Collected: _____

SVE Run Time: _____

Sparge Run Time: _____

Maintenance Work Performed, Adjustments Made and Comments:

* No electric to the system. – planned outage by Tradepoint.

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-22-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 38.2 in WC

Sparge PSI: 9.8 PSI

SVE Process Flow: 1.4 IN H20

Sparge Temp: 86.8 °F

Control Room Temp: 55 °F

XP Room Temp: 58 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 3003

Sparge Run Time: 2978

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-21-17 **Time:** 0730 **Temp:** 74°

SVE Process Vacuum: 38.0 in WC

Sparge PSI: 7.9 PSI

SVE Process Flow: 0.5 IN H20

Sparge Temp: 81.7 °F

Control Room Temp: 54 °F

XP Room Temp: 53 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 2979

Sparge Run Time: 2954

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-18-17 **Time:** 0715 **Temp:** 78°

SVE Process Vacuum: 40.9 in WC

Sparge PSI: 8.1 PSI

SVE Process Flow: 0.6 IN H20

Sparge Temp: 89.4 °F

Control Room Temp: 57 °F

XP Room Temp: 59 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 2978

Sparge Run Time: 2953

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8/17/17 **Time:** 0900 **Temp:** 75

SVE Process Vacuum: 38.1 in WC

Sparge PSI: ~~10~~ 8.2 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 90.5 °F

Control Room Temp: 59 °F

XP Room Temp: 61 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

SVE Run Time: 2958

Sparge Run Time: 2932

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-16-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 40.4 in WC

Sparge PSI: 7.6 PSI

SVE Process Flow: 1.0 IN H20

Sparge Temp: 83.7 °F

Control Room Temp: 54 °F

XP Room Temp: 58 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2932

Sparge Run Time: 2906

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-15-17 **Time:** _____ **Temp:** 74°

SVE Process Vacuum: 40.1 in WC

Sparge PSI: 7.7 PSI

SVE Process Flow: 1.0 IN H20

Sparge Temp: 86.7 °F

Control Room Temp: 56 °F

XP Room Temp: 59 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 2907

Sparge Run Time: 2881

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-14-17 **Time:** _____ **Temp:** 69°

SVE Process Vacuum: 39.6 in WC

Sparge PSI: 7.5 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 81.2 °F

Control Room Temp: 54 °F

XP Room Temp: 57 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2884

Sparge Run Time: 2858

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-11-17 **Time:** _____ **Temp:** 72°

SVE Process Vacuum: 37.4 in WC

Sparge PSI: 7.5 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 82.9 °F

Control Room Temp: 54 °F

XP Room Temp: 58 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 2811

Sparge Run Time: 2786

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-10-17 **Time:** _____ **Temp:** 65°

SVE Process Vacuum: 37.2 in WC

Sparge PSI: 7.2 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 77.3 °F

Control Room Temp: 52 °F

XP Room Temp: 56 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2787

Sparge Run Time: 2762

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-9-17 **Time:** _____ **Temp:** 69°

SVE Process Vacuum: 35.2 in WC

Sparge PSI: 7.3 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 78.4 °F

Control Room Temp: 51 °F

XP Room Temp: 56 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 2763

Sparge Run Time: 2738

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-8-17 **Time:** 0800 **Temp:** 69°

SVE Process Vacuum: 38.9 in WC

Sparge PSI: 7.4 PSI

SVE Process Flow: 0.9 IN H20

Sparge Temp: 79.6 °F

Control Room Temp: 52 °F

XP Room Temp: 55 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2739

Sparge Run Time: 2713

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-7-17 **Time:** 0840 **Temp:** 75

SVE Process Vacuum: 39.0 in WC

Sparge PSI: 7.3 PSI

SVE Process Flow: 0.7 IN H20

Sparge Temp: 79.3 °F

Control Room Temp: 53 °F

XP Room Temp: 55 °F

System Status: On (Arrival)

System Status: On (Departure)

Air Sample Collected: N

SVE Run Time: 2717

Sparge Run Time: 2691

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-4-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 38.1 in WC

Sparge PSI: 7.8 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 85.2 °F

Control Room Temp: 55 °F

XP Room Temp: 58 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 2642

Sparge Run Time: 2617

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-3-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 38.8 in WC

Sparge PSI: 7.7 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 82.3 °F

Control Room Temp: 54 °F

XP Room Temp: 57 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 2619

Sparge Run Time: 2593

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-2-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 38.0 in WC

Sparge PSI: 7.8 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 83.8 °F

Control Room Temp: 54 °F

XP Room Temp: 83.8 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 2595

Sparge Run Time: 2569

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 8-1-17 **Time:** _____ **Temp:** 69°

SVE Process Vacuum: 38.5 in WC

Sparge PSI: 7.8 PSI

SVE Process Flow: 0.6 IN H20

Sparge Temp: 82.5 °F

Control Room Temp: 53 °F

XP Room Temp: 57 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 2570

Sparge Run Time: 2545

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-31-17 **Time:** _____ **Temp:** 66°

Total Discharge: 13574856 Gal

Daily Discharge: 35,565 Gal

AST Pressure: 56.2 in WC

Dual Phase Vacuum: 20.9 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 80 °F

AST water PH 7.80 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 15 #

Surge Counter: 25,177

Remaining Defoamer: full

Run Times

Inlet Pump 1766 Outlet Pump 1930 Booster Blower 3275

AST Blower 3275 MS Pump 1438 Aeration Blower —

AST Pump 1136 Dual Phase 3001

Maintenance Work Performed, Adjustments Made and Comments:

8/31/17 0920 hrs.

PH 8.13 stroke 55

rate 500

Wildcrew on manual

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-30-17 **Time:** _____ **Temp:** 61°

Total Discharge: 13538291 Gal

Daily Discharge: 20,974 Gal

AST Pressure: 57.2 in WC

Dual Phase Vacuum: 20.7 in WC

Dual Phase Temp: 105 °F

XP Room Temp: 75° °F

AST water PH 7.25 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 30 #

Mag Gauge Flow: 2.0 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 15

Surge Counter: 25,177

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 1749 Outlet Pump 1908 Booster Blower 3251

AST Blower 3251 MS Pump 1423 Aeration Blower ✓

AST Pump 1124 Dual Phase 2978

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-28-17 **Time:** _____ **Temp:** 63° rain

Total Discharge: 13518317 Gal

Daily Discharge: _____ Gal

AST Pressure: 56.0 in WC

Dual Phase Vacuum: 20.7 in WC

Dual Phase Temp: 105 °F

XP Room Temp: 78 °F

AST water PH 9.49 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: OFF (Arrival)

System Status: on (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge _____ #

Surge Counter: 25,177

Remaining Defoamer: full

Run Times

Inlet Pump 1740

Outlet Pump 1896

Booster Blower 3235

AST Blower 3236

MS Pump 1414

Aeration Blower —

AST Pump 1117

Dual Phase 2962

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-28-17 **Time:** _____ **Temp:** 63°

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: _____ (Arrival)

System Status: _____ (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

No power – stripper cleaned –

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-24-17 **Time:** _____ **Temp:** 70°

Total Discharge: 13511759. Gal

Daily Discharge: 9405. Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

① repairs to the system – stripper to be disassembled and cleaned. –

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-23-17 **Time:** _____ **Temp:** 70°

Total Discharge: 13511759. Gal

Daily Discharge: 9405. Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

① repairs to the system – stripper to be disassembled and cleaned. –

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-22-17 **Time:** _____ **Temp:** 73°

Total Discharge: 13502354 Gal

Daily Discharge: 36 910 Gal

AST Pressure: 55.2 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 84 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 22 #

Surge Counter: 25,177

Remaining Defoamer: _____

Run Times

Inlet Pump 1733

Outlet Pump 1886

Booster Blower 3224

AST Blower 3224

MS Pump 1407

Aeration Blower —

AST Pump 1112

Dual Phase 2953

Maintenance Work Performed, Adjustments Made and Comments:

Booster Blower mtr. failed - too much water being pushed into mtr. - bled tank outside to relieve pressure - mtr. running however valve outside needs to be cracked to relieve pressure.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-21-17 **Time:** _____ **Temp:** 74°

Total Discharge: 13465444 Gal

Daily Discharge: 128 Gal (*)

AST Pressure: 56.6 in WC

Dual Phase Vacuum: 20.5 in WC

Dual Phase Temp: 84 °F

XP Room Temp: 76 °F

AST water PH 10.28 ✓ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 46 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 22

Surge Counter: 25,177

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 1716 Outlet Pump 1864 Booster Blower 3201

AST Blower 3201 MS Pump 1391 Aeration Blower ✓

AST Pump 1099 Dual Phase 2933

Maintenance Work Performed, Adjustments Made and Comments:

(*) System shut down on Fri. 8/18/17 for a planned electrical outages. Power to be restored Mon. 8/21/17.

✓ Set rate to 435

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-18-17 **Time:** _____ **Temp:** 78°

Total Discharge: 13465316 Gal

Daily Discharge: 19,318 Gal

AST Pressure: 54.3 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 86 °F

AST water PH _____ pH(7.0-9.0) 9.63

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 50 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 25 #

Surge Counter: 25,177

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 1716

Outlet Pump 1864

Booster Blower 3200

AST Blower 3201

MS Pump 1391

Aeration Blower —

AST Pump 1099

Dual Phase 2933

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8/17/17 **Time:** 0915 **Temp:** 75

Total Discharge: 13,445,998 Gal

Daily Discharge: _____ Gal

AST Pressure: 55.1 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 88 °F

AST water PH ~~10.04~~ 9.63 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge ✓ #

Surge Counter: 25177

Remaining Defoamer: 7 Gallons

Run Times

Inlet Pump 1706 Outlet Pump 1852 Booster Blower 3180

AST Blower 3180 MS Pump 1383 Aeration Blower 0

AST Pump 1093 Dual Phase 2912

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-16-17 **Time:** _____ **Temp:** 71°

Total Discharge: 13418465 Gal

Daily Discharge: 26,756 Gal

AST Pressure: 55.3 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 82 °F

AST water PH 6.95 pH(7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 50 #

Mag Gauge Flow: 1.50 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 25 #

Surge Counter: 25,177

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 1693

Outlet Pump 1836

Booster Blower 3153

AST Blower 3154

MS Pump 1371

Aeration Blower —

AST Pump 1085

Dual Phase 2886

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-15-17 **Time:** 0800 **Temp:** 74°

Total Discharge: 13391709 Gal

Daily Discharge: 11,128 Gal

AST Pressure: 55.1 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 103 °F

XP Room Temp: 84 °F

AST water PH 0920 9.20 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 28 #

Surge Counter: 25,177

Remaining Defoamer: 9 gals.

Run Times

Inlet Pump 1681 Outlet Pump 1822 Booster Blower 3129

AST Blower 3130 MS Pump 1359 Aeration Blower —

AST Pump 1076 Dual Phase 2867

Maintenance Work Performed, Adjustments Made and Comments:

stroke: 50
rate: 355

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-14-17 **Time:** 0900 **Temp:** 69°

Total Discharge: 13380581 Gal 42966 ÷ 3

Daily Discharge: 14,322 Gal

AST Pressure: 56.1 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 80 °F

AST water PH 7.41 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.90 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 28 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals

Run Times

Inlet Pump 1676 Outlet Pump 1816 Booster Blower 3106

AST Blower 3107 MS Pump 1354 Aeration Blower —

AST Pump 1073 Dual Phase 2839

Maintenance Work Performed, Adjustments Made and Comments:

STROKE: 50

rate: ~~328~~ ~~410~~ ~~337~~

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-11-17 **Time:** _____ **Temp:** 72°

Total Discharge: 13337615 Gal

Daily Discharge: 18,084 Gal

AST Pressure: 56.4 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 82 °F

AST water PH 7.48 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: ~~5~~ 4 #

Mag Gauge Flow: 1.50 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 28 #

Surge Counter: 25,177

Remaining Defoamer: full added 10 gals ±

Run Times

Inlet Pump 1653 Outlet Pump 1795 Booster Blower 3034

AST Blower 3034 MS Pump 1335 Aeration Blower —

AST Pump 1055 Dual Phase 2766

Maintenance Work Performed, Adjustments Made and Comments:

stroke 50
rate 337

Walchem on manual 8/11/17 11AM.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-10-17 **Time:** _____ **Temp:** 65°

Total Discharge: 13319531 Gal

Daily Discharge: 19,838 Gal

AST Pressure: 57.3 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 71 °F

AST water PH 5.01 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 18 #

Mag Gauge Flow: 1.90 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 3 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 1643 Outlet Pump 1786 Booster Blower 3009

AST Blower 3010 MS Pump 1327 Aeration Blower —

AST Pump 1048 Dual Phase 2742

Maintenance Work Performed, Adjustments Made and Comments:

- Acid pump set @ ~~[illegible]~~ 32.3, same stroke length.
- pH in stripper is increasing to 5.45
  - Adjusted pump again to: 33.0

pH Top Value – 8.98
Bottom – 3.40
settling Mean – 8.40

pH out of stripper pump: 7.65

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-9-17 **Time:** _____ **Temp:** 69°

Total Discharge: 13299693 Gal

Daily Discharge: 16,889 Gal

AST Pressure: 56.5 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 77 °F

AST water PH 7.71 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 22 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 6 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 1632

Outlet Pump 1776

Booster Blower 2985

AST Blower 2986

MS Pump 1318

Aeration Blower —

AST Pump 1040

Dual Phase 2718

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-8-17 **Time:** _____ **Temp:** 69°

Total Discharge: 13282804 Gal

Daily Discharge: 16,564 Gal

AST Pressure: 57.3 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 79 °F

AST water PH 7.45 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 22 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: 9

Remianing Cartridge 6 #

Surge Counter: 25,177

Remaining Defoamer: 2 gals.

Run Times

Inlet Pump 1623 Outlet Pump 1767 Booster Blower 2961

AST Blower 2962 MS Pump 1311 Aeration Blower —

AST Pump 1033 Dual Phase 2694

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-7-17 **Time:** 0845 **Temp:** 68

Total Discharge: 13,266,240 Gal

Daily Discharge: _____ Gal

AST Pressure: 56.7 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 80 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: \ #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: Y

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge \ #

Surge Counter: 25177

Remaining Defoamer: \

Run Times

Inlet Pump 1614 Outlet Pump 1759 Booster Blower 2939

AST Blower 2940 MS Pump 1303 Aeration Blower 0

AST Pump 1027 Dual Phase 2672

Maintenance Work Performed, Adjustments Made and Comments:

- Craig installing Walchem pH adjuster.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-4-17 **Time:** _____ **Temp:** 71°

Total Discharge: 13202633 Gal

Daily Discharge: 23,478 Gal

AST Pressure: 54.8 in WC

Dual Phase Vacuum: 20.2 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 84 °F

AST water PH 7.01 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 22 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 6 #

Surge Counter: 25,177

Remaining Defoamer: 7 gals. 3/4

Run Times

Inlet Pump 1579 Outlet Pump 1728 Booster Blower 2865

AST Blower 2865 MS Pump 1275 Aeration Blower —

AST Pump 1004 Dual Phase 2597

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-3-17 **Time:** _____ **Temp:** 71°

Total Discharge: 13179155 Gal

Daily Discharge: 23,123 Gal

AST Pressure: 56.2 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 82 °F

AST water PH 7.90 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 9 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 1567 Outlet Pump 1716 Booster Blower 2841

AST Blower 2842 MS Pump 1265 Aeration Blower ✓

AST Pump 995 Dual Phase 2574

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-2-17 **Time:** _____ **Temp:** 71°

Total Discharge: 13156032 Gal

Daily Discharge: 8605 Gal *

AST Pressure: 53.9 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 103 °F

XP Room Temp: 94 °F

AST water PH 7.90 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: OFF (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: NO

Remianing Cartridge 9 #

Surge Counter: 25,177

Remaining Defoamer: full added 10 gals.

Run Times

Inlet Pump 1556 Outlet Pump 1707 Booster Blower 2824

AST Blower 2825 MS Pump 1257 Aeration Blower –

AST Pump 988 Dual Phase 2557

Maintenance Work Performed, Adjustments Made and Comments:

* cell developed product leak at the inlet pump. – removed pipe fittings; and union that failed – system back up.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 8-1-17 **Time:** _____ **Temp:** 69°

Total Discharge: 13147427 Gal

Daily Discharge: 22,974 Gal

AST Pressure: 56.6 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 82 °F

AST water PH 7.81 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: NO

Remianing Cartridge 9 #

Surge Counter: 25,177

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 1549 Outlet Pump 1700 Booster Blower 2811

AST Blower 2812 MS Pump 1251 Aeration Blower —

AST Pump 983 Dual Phase 2544

Maintenance Work Performed, Adjustments Made and Comments:

inlet transfer pump has developed a major leak — shut cell off 1400 hrs.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-29-17 **Time:** _____ **Temp:** 56°

SVE Process Vacuum: 71.7 in WC

Sparge PSI: 11.5 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 76 °F

Sparge Room Temp: 87 °F

XP Room Temp: 78 °F

Sparge Run Time: 3265

SVE Run Time: 3265

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 170°

PID at TI 101: 0.4 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	4	19	12	4
2	8	5	8	11	4	14	10	5	20	6	4
3	11	5	9	5	4	15	OFF		21	20	4
4	3	5	10	8	5	16	7	5	22	OFF	
5	2	5	11	11	4	17	15	5	23	7	4
6	10	5	12	15	4	18	9	5	24	6	5
									25	OFF	

Total cfm: 187

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-28-17 **Time:** _____ **Temp:** 75°

SVE Process Vacuum: 64.6 in WC

Sparge PSI: 11.2 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 93 °F

Sparge Room Temp: 87 °F

XP Room Temp: 78 °F

Sparge Run Time: 3241

SVE Run Time: 3241

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 170°

PID at TI 101: 0.4 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	4	19	12	4
2	8	5	8	11	4	14	10	5	20	6	4
3	11	5	9	5	4	15	OFF		21	20	4
4	3	5	10	8	5	16	7	5	22	OFF	
5	2	5	11	11	4	17	15	5	23	7	4
6	10	5	12	15	4	18	9	5	24	6	5
									25	OFF.	

Total cfm: 187

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-27-17 **Time:** _____ **Temp:** 72°

SVE Process Vacuum: 65.9 in WC

Sparge PSI: 12.2 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 89 °F

Sparge Room Temp: 80 °F

XP Room Temp: 76 °F

Sparge Run Time: 3218

SVE Run Time: 3218

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 170°

PID at TI 101: 0.4 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	4	19	12	4
2	8	5	8	11	4	14	10	5	20	6	4
3	11	5	9	5	4	15	OFF		21	20	4
4	3	5	10	8	5	16	7	5	22	OFF	
5	2	5	11	11	4	17	15	5	23	7	4
6	10	5	12	15	4	18	9	5	24	6	5
									25	OFF	

Total cfm: 187

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-26-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 67.8 in WC

Sparge PSI: 11.5 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 86 °F

Sparge Room Temp: 93 °F

XP Room Temp: 91 °F

Sparge Run Time: 3193

SVE Run Time: 3193

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 190

PID at TI 101: 0.4 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	4	19	12	4
2	9	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	11	4
4	3	5	10	7	5	16	7	5	22	OFF	
5	2	5	11	11	4	17	15	4	23	7	4
6	11	5	12	15	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 179

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-25-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 69.3 in WC

Sparge PSI: 12.2 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 80 °F

Sparge Room Temp: 93 °F

XP Room Temp: 91 °F

Sparge Run Time: 3169

SVE Run Time: 3169

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 194°

PID at TI 101: 0.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: N/A.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	4	19	12	4
2	9	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	11	4
4	3	5	10	7	5	16	7	5	22	OFF	
5	2	5	11	11	4	17	15	4	23	7	4
6	11	5	12	15	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 179

Maintenance Work Performed, Adjustments Made and Comments:

SVE VFD Fault alarm – NES has been contacted with the code for the fault alarm – restarted the system, waiting for feed back from NES.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-22-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 68.1 in WC

Sparge PSI: 12.8 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 83 °F

Sparge Room Temp: 83 °F

XP Room Temp: 75 °F

Sparge Run Time: 3145

SVE Run Time: 3145

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 164°

PID at TI 101: 0.0 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: N/A.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	9	3	19	12	3
2	9	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	10	4
4	4	5	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	3	17	15	4	23	7	4
6	11	4	12	15	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 179.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-21-17 **Time:** _____ **Temp:** 68°

SVE Process Vacuum: 66.9 in WC

Sparge PSI: 12.2 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 89 °F

Sparge Room Temp: 90 °F

XP Room Temp: 87 °F

Sparge Run Time: 3122

SVE Run Time: 3122

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 188

PID at TI 101: 3.5 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	9	3	19	12	3
2	9	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	10	4
4	4	5	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	3	17	15	4	23	7	4
6	11	4	12	15	4	18	9	4	24	6	5
									25	OFF.	

Total cfm: 179

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-20-17 **Time:** _____ **Temp:** 73°

SVE Process Vacuum: 65.3 in WC

Sparge PSI: 12.0 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 91 °F

Sparge Room Temp: 88 °F

XP Room Temp: 85 °F

Sparge Run Time: 3099

SVE Run Time: 3099

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 182

PID at TI 101: 0.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	9	3	19	12	3
2	9	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	10	4
4	4	5	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	3	17	15	4	23	7	4
6	11	4	12	15	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 179

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-19-17 **Time:** 1000 **Temp:** 70°

SVE Process Vacuum: 67.6 in WC

Sparge PSI: 11.6 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 87 °F

Sparge Room Temp: 82 °F

XP Room Temp: 79. °F

Sparge Run Time: 3074

SVE Run Time: 3074

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 176°

PID at TI 101: 0.6 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	9	3	19	12	3
2	9	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	10	4
4	4	5	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	3	17	15	4	23	7	4
6	11	4	12	15	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 179

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-18-17 **Time:** 1015 **Temp:** 67°

SVE Process Vacuum: 67.0 in WC

Sparge PSI: 12.5 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 87 °F

Sparge Room Temp: 80 °F

XP Room Temp: 76 °F

Sparge Run Time: 3050

SVE Run Time: 3050

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: NO

Temp at TI 101: 176°

PID at TI 101: 1.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	3	4	13	9	3	19	12	3
2	9	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	10	4
4	4	5	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	3	17	15	4	23	7	4
6	11	4	12	15	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 179

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-15-17 **Time:** 1045 **Temp:** 67°

SVE Process Vacuum: 69.6 in WC

Sparge PSI: 13.2 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 79 °F

Sparge Room Temp: 90 °F

XP Room Temp: 85 °F

Sparge Run Time: 2979

SVE Run Time: 2979

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: NO

Temp at TI 101: 188°

PID at TI 101: 3.7 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	2	5	13	9	4	19	12	4
2	8	5	8	11	4	14	10	4	20	6	5
3	10	5	9	5	5	15	OFF		21	10	5
4	3	5	10	8	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	16	4	23	7	4
6	11	5	12	15	4	18	9	5	24	6	5
									25	OFF	

Total cfm: 179

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-14-17 **Time:** _____ **Temp:** 72°

SVE Process Vacuum: 71.2 in WC

Sparge PSI: 12.5 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 79 °F

Sparge Room Temp: 88 °F

XP Room Temp: 81 °F

Sparge Run Time: 2963.

SVE Run Time: 2963.

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: No

Temp at TI 101: 182°

PID at TI 101: 1.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	2	5	13	9	4	19	12	4
2	8	5	8	11	4	14	10	4	20	6	5
3	11	5	9	5	5	15	OFF		21	10	5
4	3	5	10	8	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	16	4	23	7	4
6	11	5	12	15	4	18	9	5	24	6	5
									25	OFF	

Total cfm: 180

Maintenance Work Performed, Adjustments Made and Comments:

SVE VFD fault alarm – change alarm set point

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-13-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 68.5 in WC

Sparge PSI: 11.2 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 85 °F

Sparge Room Temp: 76 °F

XP Room Temp: 72 °F

Sparge Run Time: 2948

SVE Run Time: 2948

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: NO

Temp at TI 101: 166°

PID at TI 101: 1.2 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	5	13	9	4	19	12	4
2	9	5	8	11	4	14	10	4	20	6	4
3	10	4	9	5	4	15	OFF		21	10	4
4	3	5	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	15	4	23	7	4
6	11	5	12	15	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 180

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-12-17 **Time:** 0930 **Temp:** 60

SVE Process Vacuum: 70.5 in WC

Sparge PSI: 11.7 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 80 °F

Sparge Room Temp: 77 °F

XP Room Temp: 72 °F

Sparge Run Time: 2923

SVE Run Time: 2923

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: No

Temp at TI 101: 170°

PID at TI 101: 1.1 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	5	13	9	4	19	12	4
2	9	5	8	11	4	14	10	4	20	6	4
3	10	4	9	5	4	15	OFF		21	11	4
4	3	5	10	7	5	16	6	5	22	OFF	
5	2	5	11	11	4	17	15	4	23	7	4
6	11	5	12	15	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 180

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9/11/17 **Time:** _____ **Temp:** 65

SVE Process Vacuum: ~~0.0~~ 68.2 in WC

Sparge PSI: ~~0.0~~ 13.2 PSI

SVE Process Flow: ~~0~~ 3.7 SCFM

Sparge Temp: ~~64~~ 82 °F

Sparge Room Temp: 65 °F

XP Room Temp: 67 °F

Sparge Run Time: 2904

SVE Run Time: 2904

(Arrival) **System Status:** Off

(Departure) **System Status:** On

Air Sample Collected: N

Temp at TI 101: 155

PID at TI 101: 0.0 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: \

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	6	7	0	5	13	8	5	19	13	4
2	5	6	8	9	5	14	11	5	20	8	5
3	11	5	9	4	5	15	0	0	21	12	5
4	0	6	10	7	5	16	6	5	22	0	0
5	0	6	11	10	4	17	16	5	23	8	5
6	11	5	12	16	3	18	10	5	24	5	5
									25	0	0

Total cfm: 170

Maintenance Work Performed, Adjustments Made and Comments:

- Fault Alarm over the weekend, power was turned off and on several times
- System was restarted manually

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-8-17 **Time:** _____ **Temp:** 61°

SVE Process Vacuum: 71.5 in WC

Sparge PSI: 12.8 PSI

SVE Process Flow: 3.4 SCFM

Sparge Temp: 81 °F

Sparge Room Temp: 79 °F

XP Room Temp: 74 °F

Sparge Run Time: 2868

SVE Run Time: 2868

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 174°

PID at TI 101: 0.6 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	2	4	13	9	4	19	12	4
2	10	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	11	4
4	3	5	10	7	5	16	7	4	22	OFF	
5	2	5	11	12	3	17	16	4	23	7	4
6	11	5	12	15	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 184

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-7-17 **Time:** 0955 **Temp:** 61°

SVE Process Vacuum: 71.1 in WC

Sparge PSI: 12.9 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 80 °F

Sparge Room Temp: 77 °F

XP Room Temp: 71 °F

Sparge Run Time: 2843

SVE Run Time: 2843

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 170

PID at TI 101: 1.2 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	5	7	0	5	13	8	4	19	12	3
2	9	5	8	11	5	14	10	5	20	7	5
3	10	5	9	5	5	15	0	0	21	10	5
4	0	6	10	7	5	16	6	5	22	0	0
5	0	5	11	11	4	17	14	4	23	7	4
6	11	5	12	15	3	18	9	5	24	6	5
									25	0	3

Total cfm: 168.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-6-17 **Time:** _____ **Temp:** 90°

SVE Process Vacuum: 67.7 in WC

Sparge PSI: 11.8 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 85 °F

Sparge Room Temp: 76 °F

XP Room Temp: 72 °F

Sparge Run Time: 2820

SVE Run Time: 2820

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes.

Temp at TI 101: 166°

PID at TI 101: 1.0 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	3	4	13	9	4	19	12	4
2	9	5	8	11	4	14	10	4	20	7	4
3	10	4	9	5	4	15	OFF		21	10	4
4	3	5	10	8	5	16	6	5	22	OFF	
5	3	5	11	11	3	17	16	4	23	7	4
6	11	5	12	15	4	18	9	5	24	6	5
									25	OFF.	

Total cfm: 183

Maintenance Work Performed, Adjustments Made and Comments:

bubbles in the scfm/air gauges — #1
#5
#7

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-5-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 70.9 in WC

Sparge PSI: 12.4 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 79 °F

Sparge Room Temp: 92 °F

XP Room Temp: 85 °F

Sparge Run Time: 2796

SVE Run Time: 2796

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 184°

PID at TI 101: 9.0 ppm

PID at MID Carbon: 0.1 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	1	5	7	38	5	13	9	4	19	12	4
2	9	5	8	11	4	14	10	4	20	6	4
3	10	4	9	5	4	15	OFF		21	11	4
4	4	5	10	7	5	16	6	5	22	OFF	
5	3	5	11	11	4	17	16	4	23	7	4
6	11	5	12	15	4	18	9	5	24	6	5
									25	OFF	

Total cfm: 187.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-1-17 **Time:** 0830 **Temp:** 63°

SVE Process Vacuum: 69.8 in WC

Sparge PSI: 12.4 PSI

SVE Process Flow: 3.9 SCFM

Sparge Temp: 76 °F

Sparge Room Temp: 70 °F

XP Room Temp: 67 °F

Sparge Run Time: 2766

SVE Run Time: 2766

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes.

Temp at TI 101: 164°

PID at TI 101: 3.1 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	2	5	7	4	5	13	9	4	19	12	4
2	9	5	8	11	4	14	10	4	20	7	5
3	11	5	9	5	4	15	OFF		21	10	4
4	3	5	10	5	5	16	6	5	22	OFF	
5	4	5	11	11	4	17	17	4	23	7	4
6	10	5	12	14	4	18	9	4	24	6	5
									25	OFF	

Total cfm: 182

Maintenance Work Performed, Adjustments Made and Comments:

inlet hose to carbon tank had a hole in it. cut out the bad section; re installed the hose.

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-29-17 **Time:** _____ **Temp:** 56°

SVE Process Vacuum: 35.7 in WC

SVE Process Flow: 0.6 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 78 °F

Sparge Room Temp: 48 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2409

SVE Run Time: 3783

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-28-17 **Time:** _____ **Temp:** 75°

SVE Process Vacuum: 33.6 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 93 °F

Sparge Room Temp: 82 °F

XP Room Temp: 82 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 2385

SVE Run Time: 3758

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-27-17 **Time:** _____ **Temp:** 72°

SVE Process Vacuum: 35.7 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 90 °F

Sparge Room Temp: 85 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2361

SVE Run Time: 3734

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-26-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 36.5 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 87 °F

Sparge Room Temp: 81 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 2337

SVE Run Time: 3710

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-25-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 37.2 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 88 °F

Sparge Room Temp: 93 °F

XP Room Temp: 90 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 2312

SVE Run Time: 3685

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-22-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 37.7 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 90 °F

Sparge Room Temp: 85 °F

XP Room Temp: 83 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 2240

SVE Run Time: 3613

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-21-17 **Time:** 0700 **Temp:** 68°

SVE Process Vacuum: 32.9 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.8 PSI

Sparge Temp: 89 °F

Sparge Room Temp: 86 °F

XP Room Temp: 86 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 2216

SVE Run Time: 3589

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-20-17 **Time:** _____ **Temp:** 73°

SVE Process Vacuum: 37.6 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.7 PSI

Sparge Temp: 91 °F

Sparge Room Temp: 89 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2193

SVE Run Time: 3566

Surge Counter: 281

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-19-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 37.2 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 88 °F

Sparge Room Temp: 85 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 2168

SVE Run Time: 3541

Surge Counter: 358

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-18-17 **Time:** 0830 **Temp:** 67°

SVE Process Vacuum: 38.4 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 88 °F

Sparge Room Temp: 82 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2145

SVE Run Time: 3518

Surge Counter: 358

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-15-17 **Time:** _____ **Temp:** 67°

SVE Process Vacuum: 37.9 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 87 °F

Sparge Room Temp: 90 °F

XP Room Temp: 86 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2073

SVE Run Time: 3446

Surge Counter: 358

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-14-17 **Time:** _____ **Temp:** 72°

SVE Process Vacuum: 32.4 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 87 °F

Sparge Room Temp: 88 °F

XP Room Temp: 85 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

Sparge Run Time: 2049

SVE Run Time: 3422

Surge Counter: 358

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-13-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 36.3 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 85 °F

Sparge Room Temp: 78 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 2025

SVE Run Time: 3398

Surge Counter: 358

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-12-17 **Time:** 1030 **Temp:** 60°

SVE Process Vacuum: 36.8 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 80 °F

Sparge Room Temp: 80 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 2001

SVE Run Time: 3374

Surge Counter: 358

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9/11/17 **Time:** _____ **Temp:** 65

SVE Process Vacuum: 37.7 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 82 °F

Sparge Room Temp: 65 °F

XP Room Temp: 68 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 1979

SVE Run Time: 3352

Surge Counter: 358

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-8-17 **Time:** _____ **Temp:** 61°

SVE Process Vacuum: 35.3 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 77 °F

Sparge Room Temp: 78 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 1905

SVE Run Time: 3278

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

PID: ~~0~~

last stage: ~~0~~

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-7-17 **Time:** _____ **Temp:** 61°

SVE Process Vacuum: 37.3 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 77 °F

Sparge Room Temp: 72 °F

XP Room Temp: 80 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1881

SVE Run Time: 3254

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-6-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 37.6 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 88 °F

Sparge Room Temp: 79 °F

XP Room Temp: 84 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1857

SVE Run Time: 3230

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-5-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 47.5 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 5.0 PSI

Sparge Temp: 75 °F

Sparge Room Temp: 94 °F

XP Room Temp: 94 °F

System Status: OFF (Arrival)

System Status: ON (Departure)

Air Sample Collected: Yes

Sparge Run Time: 1833

SVE Run Time: 3206

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-1-17 **Time:** _____ **Temp:** 63°

SVE Process Vacuum: 39.1 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 80 °F

Sparge Room Temp: 72 °F

XP Room Temp: 75 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: yes

Sparge Run Time: 1784

SVE Run Time: 3157

Surge Counter: 328

Maintenance Work Performed, Adjustments Made and Comments:

PID : ~~0~~

last stage : ~~0~~

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-29-17 **Time:** _____ **Temp:** 56°

Total Discharge: 508762 gal

Daily Discharge 14,947 gal

AST Pressure: 59.9 in WC

Oxidizer Main Temp: 637.4 °F

Oxidizer High Temp: 594.8 °F

Element Temp: 771 °F

Inf water PH 7.01 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: / (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: Yes

Defoamer level: full

Room Temp: 60.6 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 189 AST Pump 211 MS Pump 0

AST Blower 730 Outlet Pump 293 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-28-17 **Time:** _____ **Temp:** 75°

Total Discharge: 493815 gal

Daily Discharge 14,868 gal

AST Pressure: 59.1 in WC

Oxidizer Main Temp: 651.2 °F

Oxidizer High Temp: 625.2 °F

Element Temp: 766 °F

Inf water PH 7.20 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: No

Defoamer level: _____

Room Temp: 72.6 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 189 AST Pump 204 MS Pump 0

AST Blower 706 Outlet Pump 286 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-27-17 **Time:** _____ **Temp:** 72°

Total Discharge: 478947 gal

Daily Discharge 14,778 gal

AST Pressure: 59.4 in WC

Oxidizer Main Temp: 640.9 °F

Oxidizer High Temp: 559.0 °F

Element Temp: 766 °F

Inf water PH 7.24 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 8 gals.

Room Temp: 70.3 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 183 AST Pump 197 MS Pump 0

AST Blower 681 Outlet Pump 279 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-26-17 **Time:** _____ **Temp:** 70°

Total Discharge: 464169 gal

Daily Discharge 14,984 gal

AST Pressure: 59.4 in WC

Oxidizer Main Temp: 629.5 °F

Oxidizer High Temp: 586.7 °F

Element Temp: 742 °F

Inf water PH 7.10 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: yes

Defoamer level: 10 gals.

Room Temp: 68.2 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 177 AST Pump 191 MS Pump 0

AST Blower 657 Outlet Pump 272 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-25-17 **Time:** _____ **Temp:** 70°

Total Discharge: 449185 gal 44351

Mag Gauge Flow: 1.0 (0.50-1.0)

Daily Discharge 14,783 gal

System Status: ON (Arrival)

AST Pressure: 61.6 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 645.6 °F

Oxidizer High Temp: 614.6 °F

Sample Collected: NO

Element Temp: 752 °F

Bag Filters Replaced: NO

Inf water PH 7.16 pH (7.0-9.0)

Defoamer level: full

Room Temp: 69.2 °F

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Surge Counter: 281

Run Times (hours)

Inlet pump 171

AST Pump 185

MS Pump 0

AST Blower 633

Outlet Pump 265

GW Pumps #4 pump on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-22-17 **Time:** 0800 **Temp:** 71°

Total Discharge: 404834 gal

Daily Discharge 15,034 gal

AST Pressure: 60.1 in WC

Oxidizer Main Temp: 638.3 °F

Oxidizer High Temp: 610.4 °F

Element Temp: 727 °F

Inf water PH 7.0 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: (*) (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: full

Room Temp: 70.1 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 153 AST Pump 170 MS Pump 0

AST Blower 563 Outlet Pump 245 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

(*) AST air flow NOT working.
need a box of bag filters.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-21-17 **Time:** 0730 **Temp:** 68°

Total Discharge: 389800 gal

Daily Discharge 15,854 gal

AST Pressure: 58.9 in WC

Oxidizer Main Temp: 636.8 °F

Oxidizer High Temp: 610.9 °F

Element Temp: 699 °F

Inf water PH 7.20 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Defoamer level: full

Room Temp: 70.9 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 147 AST Pump 165 MS Pump 0

AST Blower 539 Outlet Pump 238 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-20-17 **Time:** _____ **Temp:** 73°

Total Discharge: 373946 gal

Daily Discharge 16,013 gal

AST Pressure: 57.3 in WC

Oxidizer Main Temp: 632.4 °F

Oxidizer High Temp: 599.7 °F

Element Temp: 709 °F

Inf water PH 7.31 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: 8 gals.

Room Temp: 70.9 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 140 AST Pump 159 MS Pump 0

AST Blower 514 Outlet Pump 231 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-19-17 **Time:** _____ **Temp:** 70°

Total Discharge: 357933 gal

Daily Discharge 13,185 gal

AST Pressure: 58.3 in WC

Oxidizer Main Temp: 627.8 °F

Oxidizer High Temp: 594.9 °F

Element Temp: 729 °F

Inf water PH 7.01 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: 10 gals.

Room Temp: 68.3 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 134 AST Pump 153 MS Pump 0

AST Blower 489 Outlet Pump 224 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-18-17 **Time:** 0800 **Temp:** 67°

Total Discharge: 344748 gal

Daily Discharge 12,970 gal

AST Pressure: 59.4 in WC

Oxidizer Main Temp: 632.9 °F

Oxidizer High Temp: 610.3 °F

Element Temp: 699 °F

Inf water PH 7.01 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.5 (0.50-1.0)

System Status: OFF (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: NO

Defoamer level: full

Room Temp: 69.8 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 128 AST Pump 149 MS Pump 0

AST Blower 469 Outlet Pump 218 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-15-17 **Time:** 1100 **Temp:** 67°

Total Discharge: 331778 gal

Daily Discharge 15012 gal

AST Pressure: 58.9 in WC

Oxidizer Main Temp: 628.2 °F

Oxidizer High Temp: 589.4 °F

Element Temp: 806 °F

Inf water PH 7.10 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: Yes

Defoamer level: full

Room Temp: 67.4 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 122 AST Pump 144 MS Pump 0

AST Blower 449 Outlet Pump 212 GW Pumps # 4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-14-17 **Time:** _____ **Temp:** 72°

Total Discharge: 316766 gal

Daily Discharge 15,774 gal

AST Pressure: 60.1 in WC

Oxidizer Main Temp: 638.7 °F

Oxidizer High Temp: 600.4 °F

Element Temp: 808 °F

Inf water PH 7.02 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.65 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 10 gals.

Room Temp: 67.9 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 116 AST Pump 133 MS Pump 0

AST Blower 426 Outlet Pump 205 GW Pumps #4 pump well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-13-17 **Time:** _____ **Temp:** 71°

Total Discharge: 300992 gal

Daily Discharge 15,345 gal

AST Pressure: 59.1 in WC

Oxidizer Main Temp: 652.0 °F

Oxidizer High Temp: 611.8 °F

Element Temp: 786 °F

Inf water PH 7.19 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.65 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 12 gals. filled

Room Temp: 67.2 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 110 AST Pump 123 MS Pump 0

AST Blower 401 Outlet Pump 198 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-12-17 **Time:** 1000 **Temp:** 60

Total Discharge: 285647 gal

Daily Discharge 14,178 gal

AST Pressure: 60.3 in WC

Oxidizer Main Temp: 650.9 °F

Oxidizer High Temp: 607.6 °F

Element Temp: 791 °F

Inf water PH 7.24 pH
(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.60
(0.50-1.0)

System Status: ON
(Arrival)

System Status: ON
(Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level:

Room Temp: 62 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 103 AST Pump 113 MS Pump 0

AST Blower 377 Outlet Pump 191 GW Pumps #4 well on.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9/11/17 **Time:** _____ **Temp:** 65

Total Discharge: 271,469 gal 47,058 ÷3 **Mag Gauge Flow:** 1.65 (0.50-1.0)

Daily Discharge 15,686 gal **System Status:** On (Arrival)

AST Pressure: 61.1 in WC

Oxidizer Main Temp: 650.7 °F **System Status:** On (Departure)

Oxidizer High Temp: 630.1 °F **Sample Collected:** Y

Element Temp: 791 °F **Bag Filters Replaced:** Y

Inf water PH 7.13 pH (7.0-9.0) **Defoamer level:** 5 Gallons

Room Temp: 62.8 °F

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI **Surge Counter:** 281

Run Times (hours)

Inlet pump 97 AST Pump 104 MS Pump 0

AST Blower 355 Outlet Pump 185 GW Pumps ___

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-8-17 **Time:** _____ **Temp:** 61°

Total Discharge: 224411 gal

Daily Discharge 16,381 gal

AST Pressure: 60.6 in WC

Oxidizer Main Temp: 645.4 °F

Oxidizer High Temp: 621.5 °F

Element Temp: 752 °F

Inf water PH 7.09 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: _____

Defoamer level: 9 gals.

Room Temp: 60.0 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 78 AST Pump 76 MS Pump 0

AST Blower 282 Outlet Pump 164 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-7-17 **Time:** _____ **Temp:** 61°

Total Discharge: 208030 gal

Daily Discharge 15,528 gal

AST Pressure: 59.8 in WC

Oxidizer Main Temp: 647.2 °F

Oxidizer High Temp: 625.8 °F

Element Temp: 783 °F

Inf water PH 7.09 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.65 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: Full

Room Temp: 60.4 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 71 AST Pump 67 MS Pump 0

AST Blower 257 Outlet Pump 157 GW Pumps #4 well pump on.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-6-17 **Time:** _____ **Temp:** 70°

Total Discharge: 192489 gal

Daily Discharge 15,075 gal

AST Pressure: 58.5 in WC

Oxidizer Main Temp: 633.6 °F

Oxidizer High Temp: 585.2 °F

Element Temp: 767 °F

Inf water PH 7.31 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 6 gals.

Room Temp: 69.0 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 64 AST Pump 59 MS Pump 0

AST Blower 233 Outlet Pump 150 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-5-17 **Time:** _____ **Temp:** 71°

Total Discharge: 177414 gal ÷ 4

Daily Discharge 11,259 gal

AST Pressure: 60.1 in WC

Oxidizer Main Temp: 587.4 °F

Oxidizer High Temp: 609.3 °F

Element Temp: 853 °F

Inf water PH 7.30 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) OFF

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 9 gal.

Room Temp: _____ °F

Surge Counter: 281

Run Times (hours)

Inlet pump 58 AST Pump 53 MS Pump 0

AST Blower 211 Outlet Pump 144 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Lost power on 9/3/17. Sunday. 0845 hrs. oxidizer NOT ready – has to be reset manually.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-1-17 **Time:** _____ **Temp:** 63°

Total Discharge: 143537 gal

Daily Discharge 16,184 gal

AST Pressure: 59.8 in WC

Oxidizer Main Temp: 645.7 °F

Oxidizer High Temp: 601.4 °F

Element Temp: 803 °F

Inf water PH 7.48 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.60 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: Yes

Defoamer level: 10 gals.

Room Temp: 64 °F

Surge Counter: 280

Run Times (hours)

Inlet pump 44 AST Pump 39 MS Pump 0

AST Blower 161 Outlet Pump 129 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-29-17 **Time:** _____ **Temp:** 56°

SVE Process Vacuum: 33.7 in WC

Sparge PSI: 6.5 PSI

SVE Process Flow: 0.7 IN H20

Sparge Temp: 68.3 °F

Control Room Temp: 48 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3754

Sparge Run Time: 3728

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-28-17 **Time:** _____ **Temp:** 75°

SVE Process Vacuum: 41.0 in WC

Sparge PSI: 7.5 PSI

SVE Process Flow: 0.6 IN H20

Sparge Temp: 86.6 °F

Control Room Temp: 56 °F

XP Room Temp: 58 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3730

Sparge Run Time: 3704

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-27-17 **Time:** _____ **Temp:** 72°

SVE Process Vacuum: 40.9 in WC

Sparge PSI: 7.4 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 81.1 °F

Control Room Temp: 54 °F

XP Room Temp: 56 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3705

Sparge Run Time: 3679

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-26-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 39.3 in WC

Sparge PSI: 9.2 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 80.1 °F

Control Room Temp: 52 °F

XP Room Temp: 55 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 3682

Sparge Run Time: 3656

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-25-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 38.4 in WC

Sparge PSI: 9.2 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 81.8 °F

Control Room Temp: 53 °F

XP Room Temp: 56 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3657

Sparge Run Time: 3631

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-22-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 38.3 in WC

Sparge PSI: 9.7 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 83.0 °F

Control Room Temp: 54 °F

XP Room Temp: 57 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 3585

Sparge Run Time: 3559

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-21-17 **Time:** _____ **Temp:** 68°

SVE Process Vacuum: 39.2 in WC

Sparge PSI: 9.4 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 81.3 °F

Control Room Temp: 53 °F

XP Room Temp: 56 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 3562

Sparge Run Time: 3536

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-20-17 **Time:** _____ **Temp:** 73°

SVE Process Vacuum: 39.4 in WC

Sparge PSI: 9.6 PSI

SVE Process Flow: 1.4 IN H20

Sparge Temp: 85.2 °F

Control Room Temp: 55 °F

XP Room Temp: 58 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3538

Sparge Run Time: 3512

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-19-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 39.8 in WC

Sparge PSI: 9.4 PSI

SVE Process Flow: 1.4 IN H20

Sparge Temp: 81.5 °F

Control Room Temp: 53 °F

XP Room Temp: 56 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 3513

Sparge Run Time: 3487

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-18-17 **Time:** _____ **Temp:** 67°

SVE Process Vacuum: 38.7 in WC

Sparge PSI: 9.4 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 81.4 °F

Control Room Temp: 53 °F

XP Room Temp: 56 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 3490

Sparge Run Time: 3464

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-15-17 **Time:** 0700 **Temp:** 67°

SVE Process Vacuum: 39.3 in WC

Sparge PSI: 9.4 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 80.2 °F

Control Room Temp: 52 °F

XP Room Temp: 55 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 3418

Sparge Run Time: 3392

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 6-14-17 **Time:** 0700 **Temp:** 72°

SVE Process Vacuum: 42.2 in WC

Sparge PSI: 9.4 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 82.1 °F

Control Room Temp: 53 °F

XP Room Temp: 56 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3395

Sparge Run Time: 3369

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-13-17 **Time:** 0700 **Temp:** 71°

SVE Process Vacuum: 40.7 in WC

Sparge PSI: 9.1 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 78.3 °F

Control Room Temp: 52 °F

XP Room Temp: 55 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3370

Sparge Run Time: 3344

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-12-17 **Time:** _____ **Temp:** 60°

SVE Process Vacuum: 34.1 in WC

Sparge PSI: 8.6 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 72.7 °F

Control Room Temp: 49 °F

XP Room Temp: 52 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3346

Sparge Run Time: 3320

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9/11/17 **Time:** _____ **Temp:** 65

SVE Process Vacuum: 28.5 in WC

Sparge PSI: 8.8 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 73.2 °F

Control Room Temp: 50 °F

XP Room Temp: 51 °F

System Status: On (Arrival)

System Status: On (Departure)

Air Sample Collected: N

SVE Run Time: 3326

Sparge Run Time: 3300

Maintenance Work Performed, Adjustments Made and Comments:

- Power was turned on and off several times over the weekend.

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 4-8-17 **Time:** _____ **Temp:** 61°

SVE Process Vacuum: 31.1 in WC

Sparge PSI: 8.7 PSI

SVE Process Flow: 1.4 IN H20

Sparge Temp: 69.2 °F

Control Room Temp: 48 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3251

Sparge Run Time: 3225

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-7-17 **Time:** _____ **Temp:** 61°

SVE Process Vacuum: 35.3 in WC

Sparge PSI: 8.8 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 70.6 °F

Control Room Temp: 48 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 3226

Sparge Run Time: 3200

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-6-17 **Time:** _____ **Temp:** 70°

SVE Process Vacuum: 42.3 in WC

Sparge PSI: 9.4 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 81.1 °F

Control Room Temp: 53 °F

XP Room Temp: 56 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3202

Sparge Run Time: 3176

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-5-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 41.8 in WC

Sparge PSI: 8.1 PSI

SVE Process Flow: 1.0 IN H20

Sparge Temp: 81.2 °F

Control Room Temp: 53 °F

XP Room Temp: 57 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3178

Sparge Run Time: 3152

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 9-1-17 **Time:** 1000 **Temp:** 63°

SVE Process Vacuum: 39.8 in WC

Sparge PSI: 8.8 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 70.6 °F

Control Room Temp: 49 °F

XP Room Temp: 52 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3083

Sparge Run Time: 3057

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-29-17 **Time:** _____ **Temp:** 56°

Total Discharge: 14354804 Gal

Daily Discharge: * 3089 Gal

AST Pressure: 57.0 in WC

Dual Phase Vacuum: 19.0 in WC

Dual Phase Temp: 90 °F

XP Room Temp: 62° °F

AST water PH 6.94 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 10 #

Mag Gauge Flow: 1.90 (1.50-2.00)

System Status: OFF (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 19 #

Surge Counter: 25,177

Remaining Defoamer: full

Run Times

Inlet Pump 2131 Outlet Pump 2348 Booster Blower 3897

AST Blower 3897 MS Pump 1758 Aeration Blower ✓

AST Pump 1390 Dual Phase 3624

Maintenance Work Performed, Adjustments Made and Comments:

* (2) water leak repairs in progress. (repaired)

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-28-17 **Time:** _____ **Temp:** 75°

Total Discharge: 14351715 Gal

Daily Discharge: 26,769 Gal

AST Pressure: 56.6 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 85 °F

AST water PH 8.23 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 14 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) OFF

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 22 #

Surge Counter: 25,177

Remaining Defoamer: 10 gale.

Run Times

Inlet Pump 2131 Outlet Pump 2347 Booster Blower 3894

AST Blower 3894 MS Pump 1757 Aeration Blower —

AST Pump 1389 Dual Phase 3621

Maintenance Work Performed, Adjustments Made and Comments:

2 leaks

① pipe from inlet tank to pump broke off the 1½" pvc pipe

② pipe nipple leaking at outlet pump & discharge counter.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-27-17 **Time:** _____ **Temp:** 72°

Total Discharge: 14324946 Gal

Daily Discharge: 26,086 Gal

AST Pressure: 56.3 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 82° °F

AST water PH 7.96 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 14 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 22 #

Surge Counter: 25,177

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 2119

Outlet Pump 2333

Booster Blower 3869

AST Blower 3869

MS Pump 1746

Aeration Blower —

AST Pump 1381

Dual Phase 3596

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-26-17 **Time:** _____ **Temp:** 70°

Total Discharge: 14298860 Gal

Daily Discharge: 22,250 Gal

AST Pressure: 55.8 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 81 °F

AST water PH 8.13 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 14 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 22 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals. add 5 gals.

Run Times

Inlet Pump 2106 Outlet Pump 2319 Booster Blower 3846

AST Blower 3846 MS Pump 1736 Aeration Blower /

AST Pump 1373 Dual Phase 3573

Maintenance Work Performed, Adjustments Made and Comments:

Cartridge filters bad

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-25-17 **Time:** _____ **Temp:** 70°

Total Discharge: 14276610 Gal 91674 ÷ 3

Daily Discharge: 30,558 Gal

AST Pressure: 54.9 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 91 °F

AST water PH 8.61 pH(7.0-9.0)
8.45

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 8 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 25 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 2096 Outlet Pump 2308 Booster Blower 3826

AST Blower 3826 MS Pump 1727 Aeration Blower —

AST Pump 1366 Dual Phase 3553

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-22-17 **Time:** _____ **Temp:** 71°

Total Discharge: 14184935 Gal

Daily Discharge: 31,532 Gal

AST Pressure: 55.8 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 85 °F

AST water PH 8.45 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 8 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: OFF No power
(Arrival)

System Status: ON
(Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 23 #

Surge Counter: 25,177

Remaining Defoamer: full

Run Times

Inlet Pump 2052 Outlet Pump 2259 Booster Blower 3752

AST Blower 3752 MS Pump 1690 Aeration Blower —

AST Pump 1336 Dual Phase 3478

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-21-17 **Time:** _____ **Temp:** 68°

Total Discharge: 14153403 Gal

Daily Discharge: 27,097 Gal

AST Pressure: 56.5 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 83 °F

AST water PH 8.65 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 23 #

Surge Counter: 25,177

Remaining Defoamer: full

Run Times

Inlet Pump 2037

Outlet Pump 2242

Booster Blower 3726

AST Blower 3726

MS Pump 1677

Aeration Blower —

AST Pump 1326

Dual Phase 3453

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-20-17 **Time:** _____ **Temp:** 73°

Total Discharge: 14126306 Gal

Daily Discharge: 23,591 Gal

AST Pressure: 56.1 in WC

Dual Phase Vacuum: 19.2 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 85 °F

AST water PH 8.80 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 13 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 23 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 2024 Outlet Pump 2227 Booster Blower 3703

AST Blower 3703 MS Pump 1666 Aeration Blower —

AST Pump 1317 Dual Phase 3429

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-19-17 **Time:** _____ **Temp:** 70°

Total Discharge: 14102715 Gal

Daily Discharge: 28,780 Gal

AST Pressure: 57.4 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 82 °F

AST water PH 8.40 8.86 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 13 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 23 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 2013 Outlet Pump 2215 Booster Blower 3678

AST Blower 3678 MS Pump 1657 Aeration Blower —

AST Pump 1310 Dual Phase 3405

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-18-17 **Time:** _____ **Temp:** 67°

Total Discharge: 14073935 Gal 90348

Daily Discharge: 30,116 Gal

AST Pressure: 56.1 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 83 °F

AST water PH 8.35 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 17 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 26 #

Surge Counter: 25,177

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 1999 Outlet Pump 2200 Booster Blower 3655

AST Blower 3655 MS Pump 1645 Aeration Blower —

AST Pump 1301 Dual Phase 3381

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-15-17 **Time:** 0730 **Temp:** 67°

Total Discharge: 13983587 Gal

Daily Discharge: 29,455 Gal

AST Pressure: 56.6 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 81 °F

AST water PH 8.10 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 17 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 4 #

Surge Counter: 25,177

Remaining Defoamer: full

Run Times

Inlet Pump 1956 Outlet Pump 2154 Booster Blower 3583

AST Blower 3583 MS Pump 1608 Aeration Blower —

AST Pump 1271 Dual Phase 3309

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-14-17 **Time:** 1000 **Temp:** 72°

Total Discharge: 13954132 Gal

Daily Discharge: 30,341 Gal

AST Pressure: 55.5 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 82° °F

AST water PH 8.16 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 21 #

Mag Gauge Flow: 1.65 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 7 #

Surge Counter: 25,177

Remaining Defoamer: 9 gals.

Run Times

Inlet Pump 1942

Outlet Pump 2139

Booster Blower 3559

AST Blower 3559

MS Pump 1596

Aeration Blower —

AST Pump 1261

Dual Phase 3286

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-13-17 **Time:** 0900 **Temp:** 71°

Total Discharge: 13923791 Gal

Daily Discharge: 30,248 Gal

AST Pressure: 56.6 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 81 °F

AST water PH 8.09 pH(7.0-9.0)

Inf Bag Filter DP: do PSI

Eff Bag Filter DP: do PSI

Remaining Bag Filters: 21 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 7 #

Surge Counter: 25,177

Remaining Defoamer: 12 gals. filled.

Run Times

Inlet Pump 1927 Outlet Pump 2124 Booster Blower 3535

AST Blower 3535 MS Pump 1584 Aeration Blower —

AST Pump 1252 Dual Phase 3261

Maintenance Work Performed, Adjustments Made and Comments:

added 3 galls. to hyd. tank - still have a leak at the booster blower.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-12-17 **Time:** 0800 **Temp:** 60°

Total Discharge: 13893543 Gal

Daily Discharge: 28,848 Gal

AST Pressure: 57.0 in WC

Dual Phase Vacuum: 20.5 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 77 °F

AST water PH 7.94 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 21 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 7

Surge Counter: 25,177

Remaining Defoamer: 9 gals.

Run Times

Inlet Pump 1913 Outlet Pump 2109 Booster Blower 3511

AST Blower 3511 MS Pump 1572 Aeration Blower —

AST Pump 1242 Dual Phase 3237

Maintenance Work Performed, Adjustments Made and Comments:

stroke: 55

rate: ~~470~~ 455

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9/11/17 **Time:** _____ **Temp:** 65

Total Discharge: 13864,695 Gal

Daily Discharge: 31,463 Gal

AST Pressure: 59.2 in WC

Dual Phase Vacuum: 20.2 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 76 °F

AST water PH 5.71 pH(7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Remaining Bag Filters: 21 #

Mag Gauge Flow: 1.55 (1.50-2.00)

System Status: On (Arrival)

System Status: On (Departure)

Sample Collected: Y

Bag Filters Replaced: Y

Cartridge Filters Replaced: Y

Remianing Cartridge 7 #

Surge Counter: 25,177

Remaining Defoamer: 0 – filled today

Run Times

Inlet Pump 1899 Outlet Pump 2094 Booster Blower 3488

AST Blower 3488 MS Pump 1560 Aeration Blower 0

AST Pump 1232 Dual Phase 3215

Maintenance Work Performed, Adjustments Made and Comments:

– pH was tested a few times, during INF transfer, pH was low ~ 5.0-5.5

non INF transfer, pH ~ 6.2-6.4

Bill can adjust when/if needed.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-8-17 **Time:** 1400 hrs. **Temp:** 57°

Total Discharge: 13770306 Gal

Daily Discharge: — Gal

AST Pressure: — in WC

Dual Phase Vacuum: — in WC

Dual Phase Temp: — °F

XP Room Temp: 65 °F

AST water PH 8.65 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 28 #

Mag Gauge Flow: 1.95 (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge ~~[illegible]~~ 10

Surge Counter: 25,177

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 1856 Outlet Pump 2047 Booster Blower 3422

AST Blower 3422 MS Pump 1520 Aeration Blower —

AST Pump 1201 Dual Phase 3148

Maintenance Work Performed, Adjustments Made and Comments:

replaced the (2) absorber tanks yesterday – had to wait 24 hrs. before the system could be started up – this allows the GAC to "de-gasify" (granular activated carbon) start up 1300 hrs. 9/8/17. Complete

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-7-17 **Time:** _____ **Temp:** 61°

Total Discharge: 13770306 Gal

Daily Discharge: 3299 Gal

AST Pressure: – in WC

Dual Phase Vacuum: – in WC

Dual Phase Temp: 47 °F

XP Room Temp: 64 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: _____ (1.50-2.00)

(*) **System Status:** OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 12 #

Surge Counter: 25,177

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 1856 Outlet Pump 2047 Booster Blower 3421

AST Blower 3421 MS Pump 1520 Aeration Blower —

AST Pump 1201 Dual Phase 3148

Maintenance Work Performed, Adjustments Made and Comments:

(*) Replacing the (2) outside absorber tanks & carbon completed 1400 9/2/17

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-6-17 **Time:** _____ **Temp:** 70°

Total Discharge:	13767007	Gal	**Mag Gauge Flow:**	1.55	(1.50-2.00)
Daily Discharge:	30,530	Gal	**System Status:** (Arrival)	ON	
AST Pressure:	55.1	in WC			
Dual Phase Vacuum:	20.1	in WC	**System Status:** (Departure)	ON OFF	
Dual Phase Temp:	102	°F	**Sample Collected:**	NO	
XP Room Temp:	82	°F	**Bag Filters Replaced:**	NO	
AST water PH	7.52	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO	
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge**	12	
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	25,177	
Remaining Bag Filters:	26	#	**Remaining Defoamer:**	6 gals.	

Run Times

Inlet Pump	1854	Outlet Pump	2045	Booster Blower	3419
AST Blower	3419	MS Pump	1518	Aeration Blower	—
AST Pump	1200	Dual Phase	3146		

Maintenance Work Performed, Adjustments Made and Comments:

System shut down so outside absorbers can be drained and made ready to replace on - 9/7/17

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-5-17 **Time:** _____ **Temp:** 71°

Total Discharge: 13736477 Gal

Daily Discharge: 32,017 Gal

AST Pressure: 55.5 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 83 °F

AST water PH 8.44 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 22 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 10 gals.

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 1840 Outlet Pump 2026 Booster Blower 3395

AST Blower 3395 MS Pump 1506 Aeration Blower —

AST Pump 1190 Dual Phase 3122

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 9-1-17 **Time:** 0730 **Temp:** 63°

Total Discharge: 13608408 Gal

Daily Discharge: 33,552 Gal

AST Pressure: 58.4 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 77° °F

AST water PH 7.51 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 26 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 12 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 1781 Outlet Pump 1951 Booster Blower 3299

AST Blower 3299 MS Pump 1452 Aeration Blower —

AST Pump 1147 Dual Phase 3026

Maintenance Work Performed, Adjustments Made and Comments:

stroke 55
rate 500

8/31 PH 7.80

9/1 PH. 7.51

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-31-17 **Time:** _____ **Temp:** 46

SVE Process Vacuum: 73.5 in WC

Sparge PSI: 15.2 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 57 °F

Sparge Room Temp: 68 °F

XP Room Temp: 70 °F

Sparge Run Time: 3979

SVE Run Time: 3981

(Arrival) **System Status:** OFF. *

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 148°

PID at TI 101: _____ ppm

PID at MID Carbon: _____ ppm

PID at EFF Carbon: _____ ppm

Surge Counter: N/A.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	6.5	5	13	10	4	19		
2	12	5	8	14	4	14			20		
3	11	5	9	6	5	15			21		
4	6	6.5	10	11	5	16			22		
5	5	5.5	11	16	4	17			23		
6	14	5	12	17	4	18			24		
									25		

Total cfm: 128.5

Maintenance Work Performed, Adjustments Made and Comments:

*power loss 6:13pm 10/30/17.
SVE VFD fault alarm.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-30-17 **Time:** _____ **Temp:** 46°

SVE Process Vacuum: 75.4 in WC

Sparge PSI: 14.2 PSI

SVE Process Flow: 3.9 SCFM

Sparge Temp: 62 °F

Sparge Room Temp: 68 °F

XP Room Temp: 70 °F

Sparge Run Time: 3965.

SVE Run Time: 3967.

(Arrival) **System Status:** OFF *

(Departure) **System Status:** ON

Air Sample Collected: NO

Temp at TI 101: _____

PID at TI 101: _____ ppm

PID at MID Carbon: _____ ppm

PID at EFF Carbon: _____ ppm

Surge Counter: N/A.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	6.5	5	13	10	4	19		
2	12	5	8	14	4	14			20		
3	11	5	9	6	5	15			21		
4	6	6.5	10	11	5	16			22		
5	5	5.5	11	16	4	17			23		
6	14	5	12	17	4	18			24		
									25		

Total cfm: 128.5

Maintenance Work Performed, Adjustments Made and Comments:

* Lost power on Sat. 10/28 / restored on Mon. 10/30 0730hrs. AM.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-27-17 **Time:** _____ **Temp:** 42° clear

SVE Process Vacuum: 74.8 in WC

Sparge PSI: 11.4 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 67 °F

Sparge Room Temp: 68 °F

XP Room Temp: 70 °F

Sparge Run Time: 3916

SVE Run Time: 3917

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 170°

PID at TI 101: 1.4 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	6.5	5	13	10	4	19		
2	12	5	8	14	4	14			20		
3	10	5	9	6	5	15			21		
4	6	6.5	10	11	5	16			22		
5	5	5.5	11	16	4	17			23		
6	14	5	12	17	4	18			24		
									25		

Total cfm: 128.50

Maintenance Work Performed, Adjustments Made and Comments:

wells that are on

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-26-17 **Time:** _____ **Temp:** 50°

SVE Process Vacuum: 53.2 in WC

Sparge PSI: 11.4 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 67 °F

Sparge Room Temp: 60 °F

XP Room Temp: 56 °F

Sparge Run Time: 3892

SVE Run Time: 3893

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 152°

PID at TI 101: 7.4 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: N/A.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	Off		7	7	6	13	15	5	19		
2	14	6	8	16	5	14			20		
3	14	5	9	7	6	15			21		
4	8	7	10	14	6	16			22		
5	6	6	11	19	5	17			23		
6	17	5	12	20	5	18			24		
									25		

Total cfm: 157

Maintenance Work Performed, Adjustments Made and Comments:

wells that are on

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-25-17 **Time:** _____ **Temp:** 53° cloudy

SVE Process Vacuum: 70.9 in WC

Sparge PSI: 13.0 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 74 °F

Sparge Room Temp: 67 °F

XP Room Temp: 63 °F

Sparge Run Time: 3868

SVE Run Time: 3869

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: NO

Temp at TI 101: 160°

PID at TI 101: 27.7 ppm

PID at MID Carbon: 1.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	BFF		7	7	6	13	15	5	19		
2	14	6	8	16	5	14			20		
3	14	5	9	7	6	15			21		
4	8	7.5	10	14	6	16			22		
5	6	6	11	19	5	17			23		
6	17	5	12	20	4.5	18			24		
									25		

Total cfm: 157

Maintenance Work Performed, Adjustments Made and Comments:

ON cells that are on

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-24-17 **Time:** _____ **Temp:** 70° cloudy

SVE Process Vacuum: 69.0 in WC

Sparge PSI: 11.5 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 84 °F

Sparge Room Temp: 76 °F

XP Room Temp: 69 °F

Sparge Run Time: 3845

SVE Run Time: 3846

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 162°

PID at TI 101: 0.2 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: N/A.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	5	7.5	13	16	5	~~19~~		
2	13	7	8	16	6	~~14~~			~~20~~		
3	14	5	9	8	6	~~15~~			~~21~~		
4	7	7.5	10	14	6	~~16~~			~~22~~		
5	6	7.0	11	19	5	~~17~~			~~23~~		
6	17	6	12	21	5	~~18~~			~~24~~		
									~~25~~		

Total cfm: 156

Maintenance Work Performed, Adjustments Made and Comments:

Wells 1-13 are on on

" 14-25 are turned off.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-23-17 **Time:** _____ **Temp:** 61° cloudy.

SVE Process Vacuum: 70.3 in WC

Sparge PSI: 12.0 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 80 °F

Sparge Room Temp: 83 °F

XP Room Temp: 82 °F

Sparge Run Time: 3820

SVE Run Time: 3821

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 178°

PID at TI 101: 1.2 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	5	13	9	4	19	12	3
2	4	5	8	10	4	14	11	4	20	6	4
3	5	5	9	5	4	15	OFF		21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	11	4	17	13	4	23	7	4
6	10	4	12	15	4	18	9	4	24	5	4
									25	OFF	

Total cfm: 164

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-20-17 **Time:** _____ **Temp:** 57° clear

SVE Process Vacuum: 72.1 in WC

Sparge PSI: 11.3 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 81 °F

Sparge Room Temp: 74 °F

XP Room Temp: 80 °F

Sparge Run Time: 3754

SVE Run Time: 3755

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 172

PID at TI 101: 0.1 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	4	19	12	3
2	8	5	8	11	4	14	11	4	20	6	4
3	10	4	9	5	4	15	OFF		21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	12	3	17	13	4	23	7	4
6	11	4	12	15	3	18	9	4	24	5	4
									25	OFF	

Total cfm: 176

Maintenance Work Performed, Adjustments Made and Comments:

478 volts at panel – low set point set at 472V (Randy)

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-19-17 **Time:** _____ **Temp:** 50° clear

SVE Process Vacuum: 74.4 in WC

Sparge PSI: 11.2 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 72 °F

Sparge Room Temp: 75 °F

XP Room Temp: 73 °F

Sparge Run Time: 3730

SVE Run Time: 3731

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 172°

PID at TI 101: 0.1 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	4	19	12	3
2	8	5	8	11	4	14	11	4	20	6	4
3	10	4	9	5	4	15	OFF		21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	12	3	17	13	4	23	7	4
6	11	4	12	15	3	18	9	4	24	5	4
									25	OFF	

Total cfm: 176

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-18-17 **Time:** _____ **Temp:** 46° clear

SVE Process Vacuum: 75.4 in WC

Sparge PSI: 12.2 PSI

SVE Process Flow: 4.0 SCFM

Sparge Temp: 69 °F

Sparge Room Temp: 62 °F

XP Room Temp: 55 °F

Sparge Run Time: 3706

SVE Run Time: 3707

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 154°

PID at TI 101: 1.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	4	19	12	3
2	8	5	8	11	4	14	11	4	20	6	4
3	10	4	9	5	4	15	OFF		21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	13	3	17	13	4	23	7	4
6	11	4	12	15	3	18	9	4	24	5	4
									25	OFF.	

Total cfm: 177

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-17-17 **Time:** _____ **Temp:** 41° clear

SVE Process Vacuum: 76.5 in WC

Sparge PSI: 11.9 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 61 °F

Sparge Room Temp: 54 °F

XP Room Temp: 51 °F

Sparge Run Time: 3682

SVE Run Time: 3683

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 150°

PID at TI 101: 1.6 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	4	19	12	3
2	8	5	8	11	4	14	11	4	20	6	4
3	10	4	9	5	4	15	OFF		21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	12	4	17	14	4	23	7	4
6	11	5	12	15	3	18	10	4	24	5	5
									25	OFF	

Total cfm: 178

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-16-17 **Time:** _____ **Temp:** 59° Raining

SVE Process Vacuum: 70.6 in WC

Sparge PSI: 11.2 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 80 °F

Sparge Room Temp: 70 °F

XP Room Temp: 68 °F

Sparge Run Time: 3658

SVE Run Time: 3659.

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 168°

PID at TI 101: 0.0 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	3	19	12	3
2	8	5	8	11	4	14	11	4	20	6	4
3	11	4	9	5	4	15	OFF		21	11	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	2	5	11	6	3	17	14	4	23	6	4
6	5	5	12	15	3	18	10	4	24	6	5
									25	OFF	

Total cfm: 170

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-13-17 **Time:** _____ **Temp:** 68°

SVE Process Vacuum: 72.4 in WC

Sparge PSI: 11.8 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 76 °F

Sparge Room Temp: 71 °F

XP Room Temp: 66 °F

Sparge Run Time: 3586

SVE Run Time: 3587

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 160°

PID at TI 101: 0.2 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	3	19	11	3
2	8	5	8	11	4	14	11	4	20	6	4
3	10	4	9	5	4	15	OFF		21	10	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	11	3	17	12	4	23	7	4
6	11	4	12	14	4	18	9	4	24	5	5
									25	OFF	

Total cfm: 171

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-12-17 **Time:** _____ **Temp:** 65°

SVE Process Vacuum: 71.3 in WC

Sparge PSI: 12.1 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 77 °F

Sparge Room Temp: 71 °F

XP Room Temp: 66 °F

Sparge Run Time: 3563

SVE Run Time: 3564

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 160°

PID at TI 101: 0.2 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	3	19	12	3
2	8	5	8	11	4	14	11	4	20	6	4
3	10	4	9	5	4	15	OFF		21	10	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	11	3	17	13	4	23	7	4
6	11	4	12	14	4	18	9	4	24	5	5
									25	OFF	

Total cfm: 173

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-11-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 67.0 in WC

Sparge PSI: 11.5 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 89 °F

Sparge Room Temp: 82 °F

XP Room Temp: 76 °F

Sparge Run Time: 3546

SVE Run Time: 3547

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 170°

PID at TI 101: 0.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	3	19	12	3
2	8	5	8	11	4	14	11	4	20	6	4
3	10	4	9	5	4	15	OFF		21	10	4
4	3	5	10	7	5	16	6	4	22	OFF	
5	3	5	11	11	3	17	13	4	23	7	4
6	11	4	12	15	4	18	9	4	24	5	5
									25	OFF	

Total cfm: 174

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-10-17 **Time:** _____ **Temp:** 75° rain

SVE Process Vacuum: 66.5 in WC

Sparge PSI: 11.5 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 91 °F

Sparge Room Temp: 80 °F

XP Room Temp: 76 °F

Sparge Run Time: 3497

SVE Run Time: 3498

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 186

PID at TI 101: 8.4 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	3	19	12	3
2	4	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	11	4
4	3	5	10	8	4	16	6	4	22	OFF	
5	3	5	11	12	4	17	14	4	23	7	4
6	11	4	12	15	4	18	9	4	24	6	4
									25	OFF	

Total cfm: 175

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-9-17 **Time:** _____ **Temp:** 75° rain

SVE Process Vacuum: 66.5 in WC

Sparge PSI: 11.5 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 91 °F

Sparge Room Temp: 80 °F

XP Room Temp: 76 °F

Sparge Run Time: 3497

SVE Run Time: 3498

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 186

PID at TI 101: 8.4 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	3	19	12	3
2	4	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	11	4
4	3	5	10	8	4	16	6	4	22	OFF	
5	3	5	11	12	4	17	14	4	23	7	4
6	11	4	12	15	4	18	9	4	24	6	4
									25	OFF	

Total cfm: 175

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-6-17 **Time:** 1100 **Temp:** 70°

SVE Process Vacuum: 64.0 in WC

Sparge PSI: 120 PSI

SVE Process Flow: 3.4 SCFM

Sparge Temp: 93 °F

Sparge Room Temp: 85 °F

XP Room Temp: 85 °F

Sparge Run Time: 3430

SVE Run Time: 3431

(Arrival) **System Status:** On

(Departure) **System Status:** On

Air Sample Collected: N

Temp at TI 101: 180

PID at TI 101: ppm

PID at MID Carbon: ppm

PID at EFF Carbon: ppm

Surge Counter: Broken Screen

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	3	4	13	8	3	19	12	3
2	8	5	8	11	4	14	11	4	20	6	4
3	10	4	9	4	4	15	0	0	21	11	4
4	3	5	10	7	5	16	5	5	22	0	0
5	3	5	11	11	3	17	15	4	23	6	4
6	11	5	12	15	3	18	9	4	24	5	5
									25	0	2

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10/5/17 **Time:** 0900 **Temp:** 65°

SVE Process Vacuum: 68.2 in WC

Sparge PSI: 12.0 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 88 °F

Sparge Room Temp: 80 °F

XP Room Temp: 76 °F

Sparge Run Time: 3405

SVE Run Time: 3406

(Arrival) **System Status:** Off

(Departure) **System Status:** On

Air Sample Collected: N

Temp at TI 101: 172

X **PID at TI 101:** ppm

X **PID at MID Carbon:** ppm

X **PID at EFF Carbon:** ppm

Surge Counter: Broken screen

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	–	5	13	8	4	19	13	4
2	5	6	8	9	5	14	12	4	20	7	5
3	10	5	9	4	5	15	0	0	21	11	5
4	–	6	10	7	5	16	6	5	22	0	0
5	–	6	11	10	4	17	16	5	23	8	5
6	11	5	12	16	4	18	10	5	24	5	5
									25	0	0

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

- SVE VFD Fault Alarm — NES & Josh working on to correct 10/5/17.

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-4-17 **Time:** _____ **Temp:** 56°

SVE Process Vacuum: 72.0 in WC

Sparge PSI: 11.1 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 80 °F

Sparge Room Temp: 75 °F

XP Room Temp: 68 °F

Sparge Run Time: 3382

SVE Run Time: 3382

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 170°

PID at TI 101: 0.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: 359.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	4	13	9	3	19	12	3
2	4	5	8	11	4	14	10	4	20	6	4
3	11	4	9	5	4	15	OFF		21	11	4
4	3	5	10	8	4	16	6	4	22	OFF	
5	3	5	11	12	4	17	14	4	23	7	4
6	11	4	12	15	4	18	9	4	24	6	4
									25	OFF	

Total cfm: 175

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-3-17 **Time:** _____ **Temp:** 50°

SVE Process Vacuum: 74.0 in WC

Sparge PSI: 11.6 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 68 °F

Sparge Room Temp: 80 °F

XP Room Temp: 78 °F

Sparge Run Time: 3358

SVE Run Time: 3358

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 174°

PID at TI 101: 1.0 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: 359

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	5	13	8	4	19	12	4
2	4	5	8	10	4	14	10	4	20	7	4
3	5	5	9	5	4	15	OFF		21	11	4
4	3	5	10	8	5	16	6	5	22	OFF	
5	3	5	11	11	4	17	15	4	23	7	4
6	5	5	12	15	4	18	9	5	24	5	5
									25	OFF	

Total cfm: 161

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-2-17 **Time:** _____ **Temp:** 50°

SVE Process Vacuum: 74.0 in WC

Sparge PSI: 11.6 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 68 °F

Sparge Room Temp: 81 °F

XP Room Temp: 80 °F

Sparge Run Time: 3337

SVE Run Time: 3337

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 178°

PID at TI 101: 1.2 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: 359

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	2	5	13	8	4	19	12	4
2	4	5	8	10	4	14	10	4	20	7	4
3	5	5	9	5	4	15	OFF		21	11	4
4	3	5	10	8	5	16	6	5	22	OFF	
5	3	5	11	11	4	17	15	4	23	7	4
6	5	5	12	15	4	18	9	5	24	5	5
									25	OFF	

Total cfm: 161

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-31-17 **Time:** _____ **Temp:** 46°

SVE Process Vacuum: 40.2 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 65 °F

Sparge Room Temp: 65 °F

XP Room Temp: 84 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3177

SVE Run Time: 4550

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-30-17 **Time:** _____ **Temp:** 46°

SVE Process Vacuum: 38.9 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 67 °F

Sparge Room Temp: _____ °F

XP Room Temp: _____ °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Sparge Run Time: 3153

SVE Run Time: 4526

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-27-17 **Time:** _____ **Temp:** 42° clear

SVE Process Vacuum: 39.9 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 64 °F

Sparge Room Temp: 71 °F

XP Room Temp: 85 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Sparge Run Time: 3081

SVE Run Time: 4454

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-26-17 **Time:** _____ **Temp:** 50°

SVE Process Vacuum: 35.3 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 69 °F

Sparge Room Temp: 63 °F

XP Room Temp: 81 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 3057

SVE Run Time: 4430

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-25-17 **Time:** _____ **Temp:** 53° Cloudy

SVE Process Vacuum: 38.4 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 75 °F

Sparge Room Temp: 68 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 3033

SVE Run Time: 4406

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-24-17 **Time:** _____ **Temp:** 70° cloudy.

SVE Process Vacuum: 36.7 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.8 PSI

Sparge Temp: 86 °F

Sparge Room Temp: 77 °F

XP Room Temp: 84 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

Sparge Run Time: 3008

SVE Run Time: 4381

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-23-17 **Time:** _____ **Temp:** 61° cloudy.

SVE Process Vacuum: 39.8 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 81 °F

Sparge Room Temp: 75 °F

XP Room Temp: 85 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

Sparge Run Time: 2985

SVE Run Time: 4358

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-20-17 **Time:** _____ **Temp:** 57° clear

SVE Process Vacuum: 38.0 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 79 °F

Sparge Room Temp: 88 °F

XP Room Temp: 85 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Sparge Run Time: 2913

SVE Run Time: 4286

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-19-17 **Time:** _____ **Temp:** 50° clear

SVE Process Vacuum: 37.3 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 69 °F

Sparge Room Temp: 76 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2889

SVE Run Time: 4262

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-18-17 **Time:** _____ **Temp:** 46° clear

SVE Process Vacuum: 38.9 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 66 °F

Sparge Room Temp: 62 °F

XP Room Temp: 84 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 2865

SVE Run Time: 4238

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 7-17-17 **Time:** _____ **Temp:** 41° clear

SVE Process Vacuum: 39.1 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 64 °F

Sparge Room Temp: 59 °F

XP Room Temp: 83 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2841

SVE Run Time: 4214

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-16-17 **Time:** _____ **Temp:** 59° raining

SVE Process Vacuum: 35.7 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 81 °F

Sparge Room Temp: 74 °F

XP Room Temp: 85 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

Sparge Run Time: 2817

SVE Run Time: 4190

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-13-17 **Time:** _____ **Temp:** 68°

SVE Process Vacuum: 37.3 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.8 PSI

Sparge Temp: 78 °F

Sparge Room Temp: 79 °F

XP Room Temp: 74 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2745

SVE Run Time: 4118

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-12-17 **Time:** _____ **Temp:** 65°

SVE Process Vacuum: 37.6 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 82 °F

Sparge Room Temp: 80 °F

XP Room Temp: 75 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 2721

SVE Run Time: 4094

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-11-17 **Time:** _____ **Temp:** 72°

SVE Process Vacuum: 36.6 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 88 °F

Sparge Room Temp: 85 °F

XP Room Temp: 81 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2697

SVE Run Time: 4070

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-10-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 35.6 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 87 °F

Sparge Room Temp: 83 °F

XP Room Temp: 80 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2673

SVE Run Time: 4046

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-9-17 **Time:** _____ **Temp:** 75° rain

SVE Process Vacuum: 36.9 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 91 °F

Sparge Room Temp: 85 °F

XP Room Temp: 83 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

Sparge Run Time: 2649

SVE Run Time: 4022

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-6-17 **Time:** _____ **Temp:** 66°

SVE Process Vacuum: 40.1 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 83 °F

Sparge Room Temp: 66 °F

XP Room Temp: 67 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2577

SVE Run Time: 3950

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10/5/17 **Time:** 0910 **Temp:** 65

SVE Process Vacuum: 38.4 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 83 °F

Sparge Room Temp: 65 °F

XP Room Temp: 66 °F

System Status: On (Arrival)

System Status: On (Departure)

Air Sample Collected: N

Sparge Run Time: 2555

SVE Run Time: 3928

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-4-17 **Time:** _____ **Temp:** 56°

SVE Process Vacuum: 39.1 in WC

SVE Process Flow: 0.6 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 76 °F

Sparge Room Temp: 72 °F

XP Room Temp: 84 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2528

SVE Run Time: 3901

Surge Counter: 359.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-3-17 **Time:** _____ **Temp:** 54°

SVE Process Vacuum: 39.1 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 73 °F

Sparge Room Temp: 83 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 2505

SVE Run Time: 3878

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-2-17 **Time:** _____ **Temp:** 50°

SVE Process Vacuum: 38.5 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.7 PSI

Sparge Temp: 71 °F

Sparge Room Temp: 82 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 2481

SVE Run Time: 3854

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-31-17 **Time:** _____ **Temp:** 46°

Total Discharge: 871840 gal

Daily Discharge 9,490 gal

AST Pressure: 55.3 in WC

Oxidizer Main Temp: 649.4 °F

Oxidizer High Temp: 611.8 °F

Element Temp: 775 °F

Inf water PH 7.11 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: yes

Defoamer level: 9 gallons

Room Temp: 55.1 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 395 AST Pump 381 MS Pump 1

AST Blower 1384 Outlet Pump 464 GW Pumps #4 pump is on

~~#5~~ " " " shut off

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-30-17 **Time:** ' **Temp:** 47° cloudy.

Total Discharge: 862350 gal 13335 ÷ 3

Daily Discharge 4,445 gal

AST Pressure: 50.5 in WC

Oxidizer Main Temp: 640.2 °F

Oxidizer High Temp: 595.1 °F

Element Temp: 751 °F

Inf water PH 8.45 pH (7.0-9.0)

nf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.65 (0.50-1.0)

System Status: (Arrival) OFF *

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: filled.

Room Temp: 52.6 °F

Surge Counter: 281

Run Times (hours)

Inlet pump_____ AST Pump_____ MS Pump_____

AST Blower_____ Outlet Pump_____ GW Pumps_____

Maintenance Work Performed, Adjustments Made and Comments:

* inlet transfere pump went bad - shut off. replaced the pump on daylite _____ restarted system at 3pm. 10/30/17

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-27-17 **Time:** _____ **Temp:** 42° clear

Total Discharge: 849014 gal

Daily Discharge 14,963 gal

AST Pressure: 58.4 in WC

Oxidizer Main Temp: 644.7 °F

Oxidizer High Temp: 614.5 °F

Element Temp: 751 °F

Inf water PH 8.03 pH
(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0
(0.50-1.0)

System Status: ON
(Arrival)

System Status: ON
(Departure)

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: full

Room Temp: 54.3 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 330 AST Pump 373 MS Pump 1

AST Blower 1291 Outlet Pump 452 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-26-17 **Time:** _____ **Temp:** 50°

Total Discharge: 834051 gal

Daily Discharge 14,794 gal

AST Pressure: 58.6 in WC

Oxidizer Main Temp: 649.3 °F

Oxidizer High Temp: 622.6 °F

Element Temp: 736 °F

Inf water PH 7.29 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 8 gals.

Room Temp: 57.4 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 324 AST Pump 367 MS Pump 1

AST Blower 1267 Outlet Pump 445 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-25-17 **Time:** _____ **Temp:** 53° cloudy

Total Discharge: 819257 gal

Daily Discharge 15,260 gal

AST Pressure: 57.3 in WC

Oxidizer Main Temp: 651.9 °F

Oxidizer High Temp: 617.6 °F

Element Temp: 780 °F

Inf water PH 7.41 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 6 gals.

Room Temp: 58.5 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 318 AST Pump 361 MS Pump 1

AST Blower 1243 Outlet Pump 437 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-24-17. **Time:** _____ **Temp:** 70° cloudy.

Total Discharge: 803997 gal

Daily Discharge 14,717 gal

AST Pressure: 54.8 in WC

Oxidizer Main Temp: 634.9 °F

Oxidizer High Temp: 600.4 °F

Element Temp: 756 °F

Inf water PH 7.16 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 8 gals.

Room Temp: 68.4 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 312 AST Pump 355 MS Pump 1

AST Blower 1219 Outlet Pump 430 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-23-17 **Time:** _____ **Temp:** 61° cloudy.

Total Discharge: 789280 gal 44763 ÷3 **Mag Gauge Flow:** 2.0 + (0.50-1.0)

Daily Discharge 14,921 gal **System Status:** ON (Arrival)

AST Pressure: 56.1 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 643.3 °F

Oxidizer High Temp: 612.9 °F **Sample Collected:** NO

Element Temp: 781 °F **Bag Filters Replaced:** NO

Inf water PH 7.83 pH (7.0-9.0) **Defoamer level:** 10 gals.

Room Temp: 63.9 °F

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI **Surge Counter:** 281

Run Times (hours)

Inlet pump 307 AST Pump 350 MS Pump 1

AST Blower 1195 Outlet Pump 423 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-20-17 **Time:** _____ **Temp:** 57° clear

Total Discharge: 744517 gal

Daily Discharge 14,955 gal

AST Pressure: 55.8 in WC

Oxidizer Main Temp: 647.8 °F

Oxidizer High Temp: 626.3 °F

Element Temp: 789 °F

Inf water PH 7.35 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .75 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Defoamer level: full

Room Temp: 61.3 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 284 AST Pump 330 MS Pump 1

AST Blower 1123 Outlet Pump 402 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-19-17 **Time:** _____ **Temp:** 50° clear

Total Discharge: 729562 gal

Daily Discharge 14,976 gal

AST Pressure: 57.0 in WC

Oxidizer Main Temp: 649.9 °F

Oxidizer High Temp: 618.9 °F

Element Temp: 760 °F

Inf water PH 7.35 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: pegged on 2 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 8 gals.

Room Temp: 58.1 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 284 AST Pump 324 MS Pump 1

AST Blower 1099 Outlet Pump 395 GW Pumps #4 well on.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-18-17 **Time:** _____ **Temp:** 46° clear

Total Discharge: 714586 gal

Daily Discharge 14,893 gal

AST Pressure: 56.7 in WC

Oxidizer Main Temp: 645.4 °F

Oxidizer High Temp: 608.4 °F

Element Temp: 776 °F

Inf water PH 7.35 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: pegged at 2.0 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 9 gals.

Room Temp: 56.0 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 278 AST Pump 318 MS Pump 1

AST Blower 1075 Outlet Pump 388 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-17-17 **Time:** _____ **Temp:** 41° clear

Total Discharge: 699693 gal

Daily Discharge 10,749 gal

AST Pressure: 56.2 in WC

Oxidizer Main Temp: 649.2 °F

Oxidizer High Temp: 609.5 °F

Element Temp: 774 °F

Inf water PH 7.42 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: pegged at 2 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 10 gals.

Room Temp: 55.2 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 272 AST Pump 313 MS Pump 1

AST Blower 1051 Outlet Pump 381 GW Pumps #4 wellow

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-16-17 **Time:** _____ **Temp:** 59° Raining

Total Discharge: 688944 gal

Daily Discharge Ø gal

AST Pressure: 57.4 in WC

Oxidizer Main Temp: 650.6 °F

Oxidizer High Temp: 619.8 °F

Element Temp: 767 °F

Inf water PH 7.30 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 2.0 (0.50-1.0)

System Status: OFF. (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 10 gals

Room Temp: 62.2 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 268 AST Pump 310 MS Pump 1

AST Blower 1034 Outlet Pump 376 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-13-17 **Time:** _____ **Temp:** 68°

Total Discharge: 688944 gal
687175.

Daily Discharge 1769 gal

AST Pressure: 62.5 in WC

Oxidizer Main Temp: 646.8 °F

Oxidizer High Temp: 609.3 °F

Element Temp: 753 °F

Inf water PH 7.75 pH
(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 0.80
(0.50-1.0)

System Status: ON
(Arrival)

System Status: OFF
(Departure)

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: 8 gals

Room Temp: 68 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 268 AST Pump 310 MS Pump 1

AST Blower 1034 Outlet Pump 376 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

shut cell down -

Cell 2 GW Pump and Treat System Data Log

computer locked

EnviroAnalytics Group

Date: 10-12-17 **Time:** 1400 **Temp:** 65°

Total Discharge: 687175 gal

Daily Discharge 8482 gal

AST Pressure: 62.5 in WC

Oxidizer Main Temp: 634.0 °F

Oxidizer High Temp: 610.5 °F

Element Temp: 734 °F

Inf water PH 8.0 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 0.8 (0.50-1.0)

System Status: (Arrival) Off

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: Y

Defoamer level: Full

Room Temp: 68 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 267 AST Pump 309 MS Pump 0

AST Blower 1032 Outlet Pump 376 GW Pumps 0

Maintenance Work Performed, Adjustments Made and Comments:

- MS High level alarm. Drained MS tank. System kicked On
- Changed Bag Filters. Reset Modem.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-11-17 **Time:** _____ **Temp:** 72°

Total Discharge: 678693 gal

Daily Discharge 14,235 gal

AST Pressure: 58.6 in WC

Oxidizer Main Temp: 638.3 °F

Oxidizer High Temp: 598.5 °F

Element Temp: 724 °F

Inf water PH 7.01 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: new gauge 0.50 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: NO

Defoamer level: full

Room Temp: 70.9 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 264 AST Pump 304 MS Pump 0

AST Blower 1018 Outlet Pump 372 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-10-17 **Time:** _____ **Temp:** 71°

Total Discharge: 664458 gal

Daily Discharge 13,857 gal

AST Pressure: 60.4 in WC

Oxidizer Main Temp: 629.8 °F

Oxidizer High Temp: 589.6 °F

Element Temp: 755 °F

Inf water PH 7.45 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: Gauge broken (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 6 gals.

Room Temp: 69.4 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 258 AST Pump 295 MS Pump 0

AST Blower 993 Outlet Pump 365 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-9-17 **Time:** _____ **Temp:** 75° rain

Total Discharge: 650601 gal 39972 ÷3

Daily Discharge 13,324 gal

AST Pressure: 59.2 in WC

Oxidizer Main Temp: 651.1 °F

Oxidizer High Temp: 612.3 °F

Element Temp: 750 °F

Inf water PH 7.75 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.90 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: yes

Bag Filters Replaced: No

Defoamer level: 8 gals.

Room Temp: 71.3 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 252 AST Pump 288 MS Pump 0

AST Blower 358 Outlet Pump 358 GW Pumps #4 wellon

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-6-17 **Time:** 1045 **Temp:** 66°

Total Discharge: 610629 gal

Daily Discharge 597131 13,498 gal

AST Pressure: 59.0 in WC

Oxidizer Main Temp: 625.1 °F

Oxidizer High Temp: 584.5 °F

Element Temp: 751 °F

Inf water PH 2.95 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 2 gpm (0.50-1.0)

System Status: On (Arrival)

System Status: On (Departure)

Sample Collected: Y

Bag Filters Replaced: Y

Defoamer level: 5 Gallons

Room Temp: 71 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 236 AST Pump 262 MS Pump 0

AST Blower 901 Outlet Pump 340 GW Pumps \

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10/5 **Time:** 1130 **Temp:** 67

Total Discharge: 597131 gal

Daily Discharge 17,100 gal

AST Pressure: 60.3 in WC

Oxidizer Main Temp: 626.0 °F

Oxidizer High Temp: 583.6 °F

Element Temp: 755 °F

Inf water PH 7.25 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

(*) **Mag Gauge Flow:** 2.0 Reset (0.50-1.0)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: Y

Bag Filters Replaced: N

Defoamer level: 5 Gallons

Room Temp: 67 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 231 AST Pump 254 MS Pump 0

AST Blower 878 Outlet Pump 334 GW Pumps —

Maintenance Work Performed, Adjustments Made and Comments:

(*) need mag gauge flow meter

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-4-17 **Time:** _____ **Temp:** 56°

Total Discharge: 580031 gal

Daily Discharge 14,002 gal

AST Pressure: 61.8 in WC

Oxidizer Main Temp: 648.3 °F

Oxidizer High Temp: 606.8 °F

Element Temp: 754 °F

Inf water PH 7.31 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .35 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: 1 gals.

Room Temp: 59.9 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 224 AST Pump 246 MS Pump 0

AST Blower 849 Outlet Pump 326 GW Pumps #4 well on.

Maintenance Work Performed, Adjustments Made and Comments:

AST discharge pressure 8 inches of water

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-3-17 **Time:** _____ **Temp:** 54°

Total Discharge: 566029 gal

Daily Discharge 14,374 gal

AST Pressure: 61.7 in WC

Oxidizer Main Temp: 641.7 °F

Oxidizer High Temp: 599.3 °F

Element Temp: 969 °F

Inf water PH 7.10 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.55 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: NO

Defoamer level: 8 gals.

Room Temp: 59.2 °F

Surge Counter: 281

Run Times (hours)

Inlet pump 219 AST Pump 239 MS Pump 0

AST Blower 825 Outlet Pump 320 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-2-17 **Time:** _____ **Temp:** 50°

Total Discharge: 551655 gal 42893 ÷3

Daily Discharge 14,297 gal

AST Pressure: 63.7 in WC

Oxidizer Main Temp: 640.0 °F

Oxidizer High Temp: 610.4 °F

Element Temp: 768 °F

Inf water PH 7.10 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Defoamer level: 10 gals. (*)

Room Temp: 57.3 °F

Surge Counter: 281

(*) added 5 gals.

Run Times (hours)

Inlet pump 213 AST Pump 231 MS Pump 0

AST Blower 801 Outlet Pump 313 GW Pumps #4 Well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-31-17 **Time:** _____ **Temp:** 46°

SVE Process Vacuum: 33.8 in WC

Sparge PSI: 7.9 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 56.9 °F

Control Room Temp: 42 °F

XP Room Temp: 44 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 4489

Sparge Run Time: 4463

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-30-17 **Time:** _____ **Temp:** 46°

SVE Process Vacuum: 39.6 in WC

Sparge PSI: 9.0 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 58.8 °F

Control Room Temp: 41 °F

XP Room Temp: 41 °F

System Status: (Arrival) OFF

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 4466

Sparge Run Time: 4440

Maintenance Work Performed, Adjustments Made and Comments:

Lost power on SAT. 10/28 AM.
power restored on Mon. 10/30 0730 hrs.

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-27-17 **Time:** _____ **Temp:** 42° clear

SVE Process Vacuum: 34.2 in WC

Sparge PSI: 7.6 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 56.0 °F

Control Room Temp: 42 °F

XP Room Temp: 44 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 4416

Sparge Run Time: 4390

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-26-17 **Time:** _____ **Temp:** 50°

SVE Process Vacuum: 36.5 in WC

Sparge PSI: 8.1 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 62.5 °F

Control Room Temp: 44 °F

XP Room Temp: 46 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 4392

Sparge Run Time: 4366

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-25-17 **Time:** _____ **Temp:** 53° cloudy.

SVE Process Vacuum: 48 in WC

Sparge PSI: 8.4 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 66.1 °F

Control Room Temp: 47 °F

XP Room Temp: 48 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 4368

Sparge Run Time: 4342

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-24-17 **Time:** _____ **Temp:** 70° cloudy.

SVE Process Vacuum: 33.7 in WC

Sparge PSI: 9.3 PSI

SVE Process Flow: 1.2 IN H20

Sparge Temp: 79.2 °F

Control Room Temp: 53 °F

XP Room Temp: 55 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 4343

Sparge Run Time: 4317

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-23-17 **Time:** _____ **Temp:** 61° cloudy

SVE Process Vacuum: 27.6 in WC

Sparge PSI: 8.8 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 74.2 °F

Control Room Temp: 50 °F

XP Room Temp: 53 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 4320

Sparge Run Time: 4294

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-20-17 **Time:** _____ **Temp:** 57° clear

SVE Process Vacuum: 31.4 in WC

Sparge PSI: 8.8 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 71.9 °F

Control Room Temp: 49 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 4248

Sparge Run Time: 4222

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-19-17 **Time:** _____ **Temp:** 50° clear

SVE Process Vacuum: 31.9 in WC

Sparge PSI: 8.2 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 61.2 °F

Control Room Temp: 44 °F

XP Room Temp: 47 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 4224

Sparge Run Time: 4198

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-18-17 **Time:** _____ **Temp:** 46° clear

SVE Process Vacuum: 31.5 in WC

Sparge PSI: 6.8 PSI

SVE Process Flow: 1.1 IN H20

Sparge Temp: 57.9 °F

Control Room Temp: 43 °F

XP Room Temp: 44 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 4200

Sparge Run Time: 4174

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 1-17-17 **Time:** _____ **Temp:** 41° clear

SVE Process Vacuum: 32.6 in WC

Sparge PSI: 6.4 PSI

SVE Process Flow: 1.3 IN H20

Sparge Temp: 52.5 °F

Control Room Temp: 40 °F

XP Room Temp: 43 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 4176

Sparge Run Time: 4150

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-16-17 **Time:** _____ **Temp:** 59° RAINING

SVE Process Vacuum: 52 in WC

Sparge PSI: 8.5 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 75.1 °F

Control Room Temp: 49 °F

XP Room Temp: 52 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 4152

Sparge Run Time: 4126

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-13-17 **Time:** _____ **Temp:** 68°

SVE Process Vacuum: 29.8 in WC

Sparge PSI: 8.9 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 70.3 °F

Control Room Temp: 49 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 4080

Sparge Run Time: 4054

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-12-17 **Time:** _____ **Temp:** 65°

SVE Process Vacuum: 37.2 in WC

Sparge PSI: 9.4 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 72.5 °F

Control Room Temp: 49 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 4057

Sparge Run Time: 4031

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-11-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 41.3 in WC

Sparge PSI: 9.2 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 83.1 °F

Control Room Temp: 54 °F

XP Room Temp: 57 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 4039

Sparge Run Time: 4013

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-10-17 **Time:** _____ **Temp:** 71°

SVE Process Vacuum: 41.7 in WC

Sparge PSI: 9.4 PSI

SVE Process Flow: 1.3 IN H20

Sparge Temp: 83.6 °F

Control Room Temp: 54 °F

XP Room Temp: 57 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 4015

Sparge Run Time: 3989

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-9-17 **Time:** _____ **Temp:** 75° rain

SVE Process Vacuum: 43.1 in WC

Sparge PSI: 7.5 PSI

SVE Process Flow: 0.9 IN H20

Sparge Temp: 85.2 °F

Control Room Temp: 54 °F

XP Room Temp: 58 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 3991

Sparge Run Time: 3965

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-6-17 **Time:** _____ **Temp:** 66°

SVE Process Vacuum: 39.6 in WC

Sparge PSI: 6.7 PSI

SVE Process Flow: 0.7 IN H20

Sparge Temp: 75.9 °F

Control Room Temp: 50 °F

XP Room Temp: 54 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3919

Sparge Run Time: 3893

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10/5/17 **Time:** 0915 **Temp:** 65

SVE Process Vacuum: 31.0 in WC

Sparge PSI: 7.0 PSI

SVE Process Flow: 0.7 IN H20

Sparge Temp: 76.7 °F

Control Room Temp: 51 °F

XP Room Temp: 56 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

SVE Run Time: 3897

Sparge Run Time: 3871

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-4-17 **Time:** _____ **Temp:** 56°

SVE Process Vacuum: 28.3 in WC

Sparge PSI: 6.6 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 68.5 °F

Control Room Temp: 48 °F

XP Room Temp: 50 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 3871

Sparge Run Time: 3845

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-3-17 **Time:** _____ **Temp:** 54°

SVE Process Vacuum: 26.9 in WC

Sparge PSI: 6.2 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 62.5 °F

Control Room Temp: 45 °F

XP Room Temp: 48 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 3847

Sparge Run Time: 3821

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 10-2-17 **Time:** _____ **Temp:** 50°

SVE Process Vacuum: 30.9 in WC

Sparge PSI: 6.0 PSI

SVE Process Flow: 0.8 IN H20

Sparge Temp: 60.2 °F

Control Room Temp: 44 °F

XP Room Temp: 47 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 3825

Sparge Run Time: 3799

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-31-17 **Time:** _____ **Temp:** 46°

Total Discharge: 1557500 / 1532800 Gal

Daily Discharge: 27,700 Gal

AST Pressure: 58.7 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 96 °F

XP Room Temp: 67 °F

AST water PH 9.07 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 17 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 24

Surge Counter: 25,178

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 2662 Outlet Pump 2841 Booster Blower 4595

AST Blower 4594 MS Pump 2112 Aeration Blower —

AST Pump 1677 Dual Phase 4267

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-30-17 **Time:** _____ **Temp:** 46°

Total Discharge: 1532800 Gal
1456000

Daily Discharge: 66800 ÷ 3 Gal 22,270

AST Pressure: 58.1 in WC

Dual Phase Vacuum: 20.2 in WC

Dual Phase Temp: 97 °F

XP Room Temp: 68 °F

AST water PH 10.45 * pH(7.0-9.0)
7.25

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 20 #

Mag Gauge Flow: 1.40 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 28 #

Surge Counter: 25,178

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 2649 Outlet Pump 2824 Booster Blower 4571

AST Blower 4570 MS Pump 2101 Aeration Blower —

AST Pump 1668 Dual Phase 4243

Maintenance Work Performed, Adjustments Made and Comments:

* ran out of acid over the weekend - refilled the drum.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-27-17 **Time:** _____ **Temp:** 42° clear

Total Discharge: 1456000 Gal

Daily Discharge: 31,500 Gal

AST Pressure: 59.9 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 96 °F

XP Room Temp: 66 °F

AST water PH 7.25 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 20 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: NO

Cartridge Filters Replaced: No

Remianing Cartridge 28 #

Surge Counter: 25,178

Remaining Defoamer: full

Run Times

Inlet Pump 2609 Outlet Pump 2774 Booster Blower 4499

AST Blower 4498 MS Pump 2069 Aeration Blower —

AST Pump 1642 Dual Phase 4171

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-26-17 **Time:** _____ **Temp:** 50°

Total Discharge: 1424500 Gal
1392600

Daily Discharge: 31,900 Gal

AST Pressure: 59.1 in WC

Dual Phase Vacuum: 20.5 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 71 °F

AST water PH 7.41 pH(7.0-9.0)
10/25 7.26

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 20 #

Mag Gauge Flow: 1.50 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 30 #

Surge Counter: 25,178

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 2594 Outlet Pump 2757 Booster Blower 4474

AST Blower 4473 MS Pump 2058 Aeration Blower —

AST Pump 1633 Dual Phase 4147

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-25-17 **Time:** _____ **Temp:** 53° cloudy

Total Discharge: 1392600 Gal
1362700

Daily Discharge: 29,900 Gal

AST Pressure: 57.2 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 74 °F

AST water PH 7.26 pH(7.0-9.0) 4.80 – 9.03
7.81

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 20 #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 25

Surge Counter: 25,178

Remaining Defoamer: full

Run Times

Inlet Pump 2578 Outlet Pump 2738 Booster Blower 4451

AST Blower 4450 MS Pump 2044 Aeration Blower —

AST Pump 1622 Dual Phase 4123

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-24-17 **Time:** _____ **Temp:** 70° cloudy.

Total Discharge: 1362700 / 1340400 Gal

Daily Discharge: 22300 Gal

AST Pressure: 56.2 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 83 °F

AST water PH 7.81 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.50 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge _____ #

Surge Counter: 25,178

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 2562 Outlet Pump 2719 Booster Blower 4426

AST Blower 4425 MS Pump 2031 Aeration Blower —

AST Pump 1611 Dual Phase 4098

Maintenance Work Performed, Adjustments Made and Comments:

readjusted Walchem

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-23-17 **Time:** _____ **Temp:** 61° cloudy

Total Discharge: 1340400 Gal 104,100 ÷3

Daily Discharge: 34,700 Gal

AST Pressure: 57.8 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 80 °F

AST water PH 8.69 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 3

Surge Counter: 25,178

Remaining Defoamer: filled 12 gals.

Run Times

Inlet Pump 2546 Outlet Pump 2701 Booster Blower 4403

AST Blower 4402 MS Pump 2019 Aeration Blower —

AST Pump 1600 Dual Phase 4075

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-20-17 **Time:** _____ **Temp:** 57° clear

Total Discharge: 1236300 Gal
1208400

Daily Discharge: 27,900 Gal

AST Pressure: 57.5 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 99 °F

XP Room Temp: 74 °F

AST water PH 8.10 pH(7.0-9.0)
8.30

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 3 #

Surge Counter: 25,178

Remaining Defoamer: full

Run Times

Inlet Pump 2497 Outlet Pump 2644 Booster Blower 4332

AST Blower 4331 MS Pump 1979 Aeration Blower —

AST Pump 1568 Dual Phase 4004

Maintenance Work Performed, Adjustments Made and Comments:

360 B6 GAC

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-19-17 **Time:** _____ **Temp:** 50° clear

Total Discharge: 1208400 Gal
1169700

Daily Discharge: 38700 Gal

AST Pressure: 59.1 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 97 °F

XP Room Temp: 69 °F

AST water PH 8.30 pH(7.0-9.0)
8.73

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.90 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 6 #

Surge Counter: 25,178

Remaining Defoamer: 5 gals.

Run Times

Inlet Pump 2480 Outlet Pump 2625 Booster Blower 4308

AST Blower 4307 MS Pump 1966 Aeration Blower —

AST Pump 1556 Dual Phase 3981

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-18-17 **Time:** _____ **Temp:** 46° clear

Total Discharge:	1169700	Gal	**Mag Gauge Flow:**	1.95 (1.50-2.00)	
Daily Discharge:	35,000	Gal	**System Status:** (Arrival)	ON	
AST Pressure:	59.1	in WC	**System Status:** (Departure)	ON	
Dual Phase Vacuum:	20.2	in WC			
Dual Phase Temp:	97	°F	**Sample Collected:**	NO	
XP Room Temp:	68	°F	**Bag Filters Replaced:**	NO	
AST water PH	8.73	pH(7.0-9.0)	**Cartridge Filters Replaced:**	NO	
Inf Bag Filter DP:	0/0	PSI	**Remianing Cartridge**	6	#
Eff Bag Filter DP:	0/0	PSI	**Surge Counter:**	25,178	
Remaining Bag Filters:	4	#	**Remaining Defoamer:**	2 gals.	

Run Times

Inlet Pump	2463	Outlet Pump	2604	Booster Blower	4283
AST Blower	4287	MS Pump	1952	Aeration Blower	—
AST Pump	1544	Dual Phase	3957		

Maintenance Work Performed, Adjustments Made and Comments:

10/18 stroke 55
rate 375

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 7-17-17 **Time:** _____ **Temp:** 41° clear

Total Discharge: 1134700 Gal
1108700

Daily Discharge: 26,000 Gal

AST Pressure: 60.7 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 96 °F

XP Room Temp: 66 °F

AST water PH 9.33 pH(7.0-9.0)
9.75 9.64

Inf Bag Filter DP: o/o PSI

Eff Bag Filter DP: o/o PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.90
(1.50-2.00)

System Status: ON
(Arrival)

System Status: ON
(Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 6 #

Surge Counter: 25,178

Remaining Defoamer: 7 gals.

Run Times

Inlet Pump 2447 Outlet Pump 2584 Booster Blower 4259

AST Blower 4258 MS Pump 1937 Aeration Blower —

AST Pump 1532 Dual Phase 3932

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-16-17 **Time:** _____ **Temp:** 59° RAINING

Total Discharge: 1108700 Gal

Daily Discharge: 31,500 Gal 1Day.

AST Pressure: 57.4 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 65 °F

AST water PH 9.75 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 0 #

Mag Gauge Flow: 1.65 (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 6 #

Surge Counter: 25,178

Remaining Defoamer: 10 gals

Run Times

Inlet Pump 2435 Outlet Pump 2570 Booster Blower 4242

AST Blower 4241 MS Pump 1927 Aeration Blower —

AST Pump 1523 Dual Phase 3915

Maintenance Work Performed, Adjustments Made and Comments:

rate 330

stroke 50

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-13-17 **Time:** _____ **Temp:** 68°

Total Discharge: 1077200 Gal

Daily Discharge: 34,700 Gal

AST Pressure: 58.7 in WC

Dual Phase Vacuum: 20.7 in WC

Dual Phase Temp: 99 °F

XP Room Temp: 74° °F

AST water PH 8.75 pH(7.0-9.0)
8.75

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.50 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 6 #

Surge Counter: 25,178

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 2418 Outlet Pump 2549 Booster Blower 4217

AST Blower 4216 MS Pump 1911 Aeration Blower —

AST Pump 1510 Dual Phase 3890

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-12-17 **Time:** _____ **Temp:** 65° rain

Total Discharge: 1042500 Gal
1035200

Daily Discharge: 7300 Gal

AST Pressure: 58.1 in WC

Dual Phase Vacuum: 20.7 in WC

Dual Phase Temp: 99. °F

XP Room Temp: 74° °F

AST water PH 8.95 pH(7.0-9.0)
8.75

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 0 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: OFF (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 6 #

Surge Counter: 25,178

Remaining Defoamer: 9 gals.

Run Times

Inlet Pump 2402 Outlet Pump 2533 Booster Blower 4195

AST Blower 4195 MS Pump 1898 Aeration Blower —

AST Pump 1500 Dual Phase 3872

Maintenance Work Performed, Adjustments Made and Comments:

inlet tank high level alarm. 6:31 Am.

stroke 55
rate 270

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-11-17 **Time:** _____ **Temp:** 71°

Total Discharge: 1035200 Gal
1032400

Daily Discharge: 2800 Gal

AST Pressure: 54.4 in WC

Dual Phase Vacuum: 21.0 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 78 °F

AST water PH 8.25 pH(7.0-9.0)
8.23

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) on

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 9

Surge Counter: 25,178

Remaining Defoamer: full

Run Times

Inlet Pump 2379 Outlet Pump 2529 Booster Blower 4172

AST Blower 4172 MS Pump 1894 Aeration Blower —

AST Pump 1498 Dual Phase 3866

Maintenance Work Performed, Adjustments Made and Comments:

1½ close pipe nipple
reducer busling 1½" to 1"
stripper pump

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-10-17 **Time:** _____ **Temp:** 71°

Total Discharge: 1032400 Gal

Daily Discharge: 23,500 Gal

AST Pressure: 54.3 in WC

Dual Phase Vacuum: 20.2 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 86 °F

AST water PH 8.23 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 0 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: on (Arrival)

System Status: on (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 8 #

Surge Counter: 25,178

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 2352

Outlet Pump 2529

Booster Blower 4155

AST Blower 4156

MS Pump 1893

Aeration Blower —

AST Pump 1498

Dual Phase 3864

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-9-17 **Time:** _____ **Temp:** 75° rain

Total Discharge: 1008900 Gal 74,100 ÷ 3
934800

Daily Discharge: 24,666 Gal

AST Pressure: 56.4 in WC

Dual Phase Vacuum: 19.3 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 84 °F

AST water PH 8.28 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.25 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 9

Surge Counter: 25,179

Remaining Defoamer: 8 gals

Run Times

Inlet Pump 2339 Outlet Pump 2514 Booster Blower 4130

AST Blower 4130 MS Pump 1883 Aeration Blower ✓

AST Pump 1491 Dual Phase 3848

Maintenance Work Performed, Adjustments Made and Comments:

10/6 stroke 55
rate 280
PH. [redacted].32

10/9 55 stroke
250 rate
8.2[redacted] PH.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-6-17 **Time:** _____ **Temp:** 66°

Total Discharge: 934800 Gal
901700
Daily Discharge: 33,100 Gal

AST Pressure: 56.7 in WC

Dual Phase Vacuum: 19.5 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 79 °F

AST water PH 8.32 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 4 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 9 #

Surge Counter: 25,178

Remaining Defoamer: 12 galls.

Run Times

Inlet Pump 2271 Outlet Pump 2472 Booster Blower 4057

AST Blower 4057 MS Pump 1851 Aeration Blower —

AST Pump 1466 Dual Phase 3784

Maintenance Work Performed, Adjustments Made and Comments:

Stroke 55
rate 280

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10/5/17 **Time:** 0915 **Temp:** 66°

Total Discharge: inside 901700 ~~1436244~~ comp. o/service Gal

Daily Discharge: 39,900 Gal

AST Pressure: 56.9 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 99 °F

XP Room Temp: 69 °F
11.57 - wall

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 5 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: ~~N~~ Y

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge 12

Surge Counter: 25178

Remaining Defoamer: 8 Gallons

Run Times

Inlet Pump 2252 Outlet Pump 2455 Booster Blower 4036

AST Blower 4036 MS Pump 1838 Aeration Blower 0

AST Pump 1456 Dual Phase 3763

Maintenance Work Performed, Adjustments Made and Comments:

- Needs new anti-scalant drum – changed 10-5-17

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-4-17 **Time:** 0730 **Temp:** 56°

Total Discharge: 0861800 Gal

Daily Discharge: 28,400 Gal (*)

AST Pressure: 59.6 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 73 °F

AST water PH 8.47 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 8 gal

Surge Counter: 25,178

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 2227 Outlet Pump 2432 Booster Blower 4009

AST Blower 4009 MS Pump 1822 Aeration Blower —

AST Pump 1442 Dual Phase 3736

Maintenance Work Performed, Adjustments Made and Comments:

(*) Using readings off the manual gauge inside the cell.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-3-17 **Time:** 0800 **Temp:** 54°

0833400

Total Discharge: 14362420 Gal (*)

Daily Discharge: NA Gal

AST Pressure: 60.0 in WC

Dual Phase Vacuum: 19.6 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 70 °F

AST water PH 8.47 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 6 #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 16 #

Surge Counter: 25,177

Remaining Defoamer: 10 gals.

Run Times

Inlet Pump 2207 Outlet Pump 2414 Booster Blower 3988

AST Blower 3988 MS Pump 1808 Aeration Blower —

AST Pump 1431 Dual Phase 3715

Maintenance Work Performed, Adjustments Made and Comments:

(*) OHL ed discharge counter — took the average for daily discharge —

reading at manual gauge 0833400

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 10-2-17 **Time:** 0900 **Temp:** 50°

Total Discharge: 14362420 Gal

Daily Discharge: 7,616 Gal

AST Pressure: 58.9 in WC

Dual Phase Vacuum: 20.7 in WC

Dual Phase Temp: 97 °F

XP Room Temp: 68 °F

AST water PH 8.27 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 6 #

Mag Gauge Flow: 1.60 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 16 #

Surge Counter: 25,177

Remaining Defoamer: full added 10 gals.

Run Times

Inlet Pump 2185 Outlet Pump 2395 Booster Blower 3965

AST Blower 3965 MS Pump 1794 Aeration Blower —

AST Pump 1419 Dual Phase 3692

Maintenance Work Performed, Adjustments Made and Comments:

stroke 55

rate 325

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-30-17 **Time:** _____ **Temp:** 40°

Total Discharge: 1266644 gal

Daily Discharge 12,624 gal

AST Pressure: 60.2 in WC

Oxidizer Main Temp: 646.5 °F

Oxidizer High Temp: 602.8 °F

Element Temp: 766 °F

Inf water PH 7.35 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .85 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 8 gals.

Room Temp: 55.5 °F

Surge Counter: 288

Run Times (hours)

Inlet pump 577 AST Pump 538 MS Pump 1

AST Blower 2103 Outlet Pump 689 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-29-17 **Time:** _____ **Temp:** 40°

Total Discharge: 1254020 gal

Daily Discharge 11,778 gal

AST Pressure: 59.3 in WC

Oxidizer Main Temp: 646.4 °F

Oxidizer High Temp: 604.7 °F

Element Temp: 751 °F

Inf water PH 7.35 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 4 gals.

Room Temp: 56.8 °F

Surge Counter: 288

Run Times (hours)

Inlet pump 571 AST Pump 532 MS Pump 1

AST Blower 2078 Outlet Pump 681 GW Pumps #4 well on.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-28-17 **Time:** _____ **Temp:** 38°

Total Discharge: 1242242 gal

Daily Discharge 11,917 gal

AST Pressure: 60.4 in WC

Oxidizer Main Temp: 642.2 °F

Oxidizer High Temp: 603.0 °F

Element Temp: 769 °F

Inf water PH 7.52 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .85 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: NO

Defoamer level: 5 gals.

Room Temp: 54.5 °F

Surge Counter: 288

Run Times (hours)

Inlet pump 565 AST Pump 527 MS Pump 1

AST Blower 2055 Outlet Pump 675 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-27-17 **Time:** _____ **Temp:** 43°

Total Discharge: 1230325 gal 61814 ÷ 5

Mag Gauge Flow: .90 (0.50-1.0)

Daily Discharge 12,362 gal

System Status: ON (Arrival)

AST Pressure: 60.7 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 636.2 °F

Oxidizer High Temp: 595.8 °F

Sample Collected: NO

Element Temp: 769 °F

Bag Filters Replaced: yes

Inf water PH 7.31 pH (7.0-9.0)

Defoamer level: 7 gals.

Room Temp: 56.5 °F

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Surge Counter: 288

Run Times (hours)

Inlet pump 559 AST Pump 522 MS Pump 1

AST Blower 2031 Outlet Pump 668 GW Pumps # 4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-22-17 **Time:** _____ **Temp:** 52°

Total Discharge: 1168511 gal

Daily Discharge 11,954 gal

AST Pressure: 56.3 in WC

Oxidizer Main Temp: 644.7 °F

Oxidizer High Temp: 600.2 °F

Element Temp: 772 °F

Inf water PH 7.89 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .90 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Defoamer level: full

Room Temp: 58.7 °F

Surge Counter: 286.

Run Times (hours)

Inlet pump 529 AST Pump 500 MS Pump 1

AST Blower 1911 Outlet Pump 631 GW Pumps —

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-21-17 **Time:** _____ **Temp:** 42°

Total Discharge: 1156557 gal

Daily Discharge 12,607 gal

AST Pressure: 59.0 in WC

Oxidizer Main Temp: 644.2 °F

Oxidizer High Temp: 601.2 °F

Element Temp: 768 °F

Inf water PH 7. pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 10 gals.

Room Temp: 52.9 °F

Surge Counter: 286

Run Times (hours)

Inlet pump 523 AST Pump 496 MS Pump 1

AST Blower 1887 Outlet Pump 624 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-20-17 **Time:** _____ **Temp:** 39°

Total Discharge: 1143950 gal 38,519

Mag Gauge Flow: .85 (0.50-1.0)

Daily Discharge 12,839 gal

System Status: (Arrival) ON

AST Pressure: 60.9 in WC

System Status: (Departure) ON

Oxidizer Main Temp: 642.7 °F

Oxidizer High Temp: 602.5 °F

Sample Collected: NO

Element Temp: 764 °F

Bag Filters Replaced: yes

Inf water PH 7.39 pH (7.0-9.0)

Defoamer level: full

Room Temp: 52.6 °F

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Surge Counter: 286

Run Times (hours)

Inlet pump 498

AST Pump 491

MS Pump 1

AST Blower 1864

Outlet Pump 617

GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-17-17 **Time:** _____ **Temp:** 40°

Total Discharge: 1105431 gal

Daily Discharge 13,558 gal

AST Pressure: 60.2 in WC

Oxidizer Main Temp: 642.9 °F

Oxidizer High Temp: 605.7 °F

Element Temp: 750 °F

Inf water PH 7.35 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: _____ (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Defoamer level: _____

Room Temp: 53.9 °F

Surge Counter: 286

Run Times (hours)

Inlet pump 498 AST Pump 476 MS Pump 1

AST Blower 1792 Outlet Pump 594 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-16-17 **Time:** _____ **Temp:** 45°

Total Discharge: 1091873 gal

Daily Discharge 13,078 gal

AST Pressure: 58.4 in WC

Oxidizer Main Temp: 646.8 °F

Oxidizer High Temp: 602.5 °F

Element Temp: 750 °F

Inf water PH 7.32 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 6 gals.

Room Temp: 56.6 °F

Surge Counter: 286

Run Times (hours)

Inlet pump 491 AST Pump 472 MS Pump 1

AST Blower 1767 Outlet Pump 586 GW Pumps #4 well is on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-15-17 **Time:** _____ **Temp:** 36°

Total Discharge: 1078795 gal

Daily Discharge 11,940 gal

AST Pressure: 58.9 in WC

Oxidizer Main Temp: 649.1 °F

Oxidizer High Temp: 610.2 °F

Element Temp: 741 °F

Inf water PH 7.38 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.25 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: yes

Defoamer level: _____

Room Temp: 51.3 °F

Surge Counter: 286

Run Times (hours)

Inlet pump 484 AST Pump 469 MS Pump 1

AST Blower 1743 Outlet Pump 519 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-14-17 **Time:** _____ **Temp:** 39°

Total Discharge: 1066855 gal

Daily Discharge 12,469 gal

AST Pressure: 57.1 in WC

Oxidizer Main Temp: 630.3 °F

Oxidizer High Temp: 589.8 °F

Element Temp: 768 °F

Inf water PH 7.15 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.15 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: _____

Defoamer level: 8 gals.

Room Temp: 53.6 °F

Surge Counter: 286

Run Times (hours)

Inlet pump 478 AST Pump 464 MS Pump 1

AST Blower 1721 Outlet Pump 572 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-13-17 **Time:** _____ **Temp:** 40°

Total Discharge: 1054386 gal 40792 ÷3

Mag Gauge Flow: 1.15 (0.50-1.0)

Daily Discharge 13,597 gal

System Status: ON (Arrival)

AST Pressure: 58.5 in WC

System Status: ON (Departure)

Oxidizer Main Temp: 629.5 °F

Oxidizer High Temp: 591.8 °F

Sample Collected: No

Element Temp: 764 °F

Bag Filters Replaced: NO

Inf water PH 7.13 pH (7.0-9.0)

Defoamer level: 9 gal.

Room Temp: 52.5 °F

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Surge Counter: 286

Run Times (hours)

Inlet pump 472 AST Pump 459 MS Pump 1

AST Blower 1698 Outlet Pump 565 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

air stripper high level alarm

cleaned the defoamer pick up noggle in the bucket

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-10-17 **Time:** 0725 **Temp:** 45°

Total Discharge: 1,013,594 gal

Daily Discharge 13,130 gal

AST Pressure: 56 in WC

Oxidizer Main Temp: 632 °F

Oxidizer High Temp: 597 °F

Element Temp: 761 °F

Inf water PH 7.1 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 1.20 (0.50-1.0)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: No

Bag Filters Replaced: Yes

Defoamer level: 1/2 - Full

Room Temp: 54 °F

Surge Counter: 286

Run Times (hours)

Inlet pump 453 AST Pump 439 MS Pump 1

AST Blower 1840 Outlet Pump 542 GW Pumps -

Maintenance Work Performed, Adjustments Made and Comments:

AST high level every 20 - 30 min

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-9-17 **Time:** 0800 **Temp:** 48°

Total Discharge: 1,000,464 gal

Daily Discharge 13,777 gal

AST Pressure: 56 in WC

Oxidizer Main Temp: 633 °F

Oxidizer High Temp: 594 °F

Element Temp: 743 °F

Inf water PH 7 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 1.1 (0.50-1.0)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: 1/2

Room Temp: 55 °F

Surge Counter: 286

Run Times (hours)

Inlet pump 447 AST Pump 433 MS Pump 1

AST Blower 1602 Outlet Pump 534 GW Pumps –

Maintenance Work Performed, Adjustments Made and Comments:

AST high leveling

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-8-17 **Time:** 0740 **Temp:** 39°

Total Discharge: 986,687 gal

Daily Discharge 12,952 gal

AST Pressure: 57.2 in WC

Oxidizer Main Temp: 647.5 °F

Oxidizer High Temp: 608.8 °F

Element Temp: 757 °F

Inf water PH 7.2 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 1.15 (0.50-1.0)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: ~~No~~ Yes

Bag Filters Replaced: No

Defoamer level: 3/4 Full

Room Temp: 53 °F

Surge Counter: 286

Run Times (hours)

Inlet pump 441 AST Pump 428 MS Pump 1

AST Blower 1578 Outlet Pump 526 GW Pumps –

Maintenance Work Performed, Adjustments Made and Comments:

No AST Xfer pump alarms overnight

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-7-17 **Time:** 0855 **Temp:** 46

Total Discharge: 973,735 gal

Daily Discharge 12,855 gal

AST Pressure: 56.3 in WC

Oxidizer Main Temp: 641 °F

Oxidizer High Temp: 608 °F

Element Temp: 766 °F

Inf water PH – pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 1.1 (0.50-1.0)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: Yes

Bag Filters Replaced: Yes

Defoamer level: 3/4 Full

Room Temp: °F

Surge Counter: 286

Run Times (hours)

Inlet pump 435 AST Pump 423 MS Pump 1

AST Blower 1555 Outlet Pump 519 ~~GW Pumps~~

Maintenance Work Performed, Adjustments Made and Comments:

Slowed Inlet Xfer pump to attempt to prevent Stripper Xfer pump from high leveling. Increased PSI to 43 at Inlet pump - reduced Defoamer from 45 to 40

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11/6/17 **Time:** 1040 **Temp:** 60

Total Discharge: 960880 gal

Daily Discharge 15048 x3 gal

AST Pressure: 54.3 in WC

Oxidizer Main Temp: 649.8 °F

Oxidizer High Temp: 611.1 °F

Element Temp: 750 °F

Inf water PH 7.20 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 0.90 (0.50-1.0)

System Status: On (Arrival)

System Status: On (Departure)

Sample Collected: Y

Bag Filters Replaced: N

Defoamer level: 10 G

Room Temp: 70 °F

Surge Counter: 286

Run Times (hours)

Inlet pump 430 AST Pump 418 MS Pump 1

AST Blower 1532 Outlet Pump 511 GW Pumps _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-3-17 **Time:** _____ **Temp:** 57°

Total Discharge: 915735 gal

Daily Discharge 14,380 gal

AST Pressure: 55.1 in WC

Oxidizer Main Temp: 645.6 °F

Oxidizer High Temp: 603.2 °F

Element Temp: 731 °F

Inf water PH 7.10 pH (7.0-9.0)

f Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.10 (0.50-1.0)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Defoamer level: full

Room Temp: 58.8 °F

Surge Counter: 285

Run Times (hours)

Inlet pump 412 AST Pump 395 MS Pump 1

AST Blower 1456 Outlet Pump 487 GW Pumps #4 well is on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-2-17 **Time:** _____ **Temp:** 55°

Total Discharge: 901355 gal

Daily Discharge 10,977 gal

AST Pressure: 55.8 in WC

Oxidizer Main Temp: 626.9 °F

Oxidizer High Temp: 589.1 °F

Element Temp: 758 °F

Inf water PH 7.02 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.10 (0.50-1.0)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 9 gals.

Room Temp: 58.9 °F

Surge Counter: 285

Run Times (hours)

Inlet pump 406 AST Pump 390 MS Pump 1

AST Blower 1432 Outlet Pump 479 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

drained MS tank
cleaned both view tubes and the floats.

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-1-17 **Time:** _____ **Temp:** 46°

Total Discharge: 890378 gal

Daily Discharge 18,538 gal

AST Pressure: 55.9 in WC

Oxidizer Main Temp: 637.5 °F

Oxidizer High Temp: 601.3 °F

Element Temp: 777 °F

Inf water PH 7.01 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: on (Arrival)

System Status: on (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Defoamer level: 8 gals.

Room Temp: 59.1 °F

Surge Counter: 285

Run Times (hours)

Inlet pump 402 AST Pump 387 MS Pump 1

AST Blower 1414 Outlet Pump 474 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-1-17 **Time:** _____ **Temp:** 46°

SVE Process Vacuum: 76.4 in WC

Sparge PSI: 12.2 PSI

SVE Process Flow: 3.9 SCFM

Sparge Temp: 63 °F

Sparge Room Temp: 57 °F

XP Room Temp: 55 °F

Sparge Run Time: 3997

SVE Run Time: 3999

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: NO

Temp at TI 101: 156°

PID at TI 101: 8.7 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	~~10~~	~~6.5~~	7	6	7.0	13	14	6.0	19		
2	10	6.5	8	18	5.0	14			20		
3	15	5	9	8	6.0	15			21		
4	7	7.5	10	15	6.0	16			22		
5	5	7.5	11	20	5.0	17			23		
6	19	6.0	12	21	5.0	18			24		
									25		

Total cfm: 158.0

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-30-17 **Time:** _____ **Temp:** 40°

Total Discharge: 2248800 Gal
2223900

Daily Discharge: 24,900 Gal

AST Pressure: 60.9 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 67 °F

AST water PH 8.20 pH(7.0-9.0)
8.43

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: ✓ #

Mag Gauge Flow: 1.80
(1.50-2.00)

System Status: ON
(Arrival)

System Status: ON
(Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge ✓

Surge Counter: 25,178

Remaining Defoamer: 7 gal.

Run Times

Inlet Pump 3016 Outlet Pump 3300 Booster Blower 5239

AST Blower 5238 MS Pump 2400 Aeration Blower ✓

AST Pump 1907 Dual Phase 4909

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-29-17 **Time:** _____ **Temp:** 40°

Total Discharge: 2223900 Gal

Daily Discharge: 28,300 Gal

AST Pressure: 61.4 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 68 °F

AST water PH 8.43 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.45 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge _____ #

Surge Counter: 25,178

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 2989 Outlet Pump 3279 Booster Blower 5214

AST Blower 5213 MS Pump 2388 Aeration Blower —

AST Pump 1897 Dual Phase 4884

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-28-17 **Time:** _____ **Temp:** 38°

Total Discharge: 2195600 / 2168700 Gal

Daily Discharge: 26,900 Gal

AST Pressure: 62.5 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 99 °F

XP Room Temp: 64 °F

AST water PH 8.29 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.50 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge _____ #

Surge Counter: 25,178

Remaining Defoamer: 8 gals.

Run Times

Inlet Pump 2989 Outlet Pump 3260 Booster Blower 5190

AST Blower 5189 MS Pump 2377 Aeration Blower —

AST Pump 1889 Dual Phase 4860

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-27-17 **Time:** _____ **Temp:** 43°

Total Discharge: 2168700 Gal (133600 ÷ 5)

Daily Discharge: 26,720 Gal

AST Pressure: 59.4 in WC

Dual Phase Vacuum: 18.0 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 70 °F

AST water PH 8.94 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: on (Arrival)

System Status: on (Departure)

Sample Collected: No

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge _____

Surge Counter: 25,178

Remaining Defoamer: full added 12 gals.

Run Times

Inlet Pump 2976 Outlet Pump 3243 Booster Blower 5169

AST Blower 5168 MS Pump 2367 Aeration Blower —

AST Pump 1881 Dual Phase 4839

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-22-17 **Time:** _____ **Temp:** 52°

Total Discharge: 2035100 Gal
2010400

Daily Discharge: 24,700 Gal

AST Pressure: 59.8 in WC

Dual Phase Vacuum: 20.5 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 74 °F

AST water PH 8.04 7.32 pH(7.0-9.0)
8.90

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.50
(1.50-2.00)

System Status: ON
(Arrival)

System Status: ON
(Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge _____

Surge Counter: 25,178

Remaining Defoamer: full

Run Times

Inlet Pump 2908 Outlet Pump 3148 Booster Blower 5047

AST Blower 5046 MS Pump 2312 Aeration Blower —

AST Pump 1837 Dual Phase 4716

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-21-17 **Time:** _____ **Temp:** 42°

Total Discharge: 2010400 Gal
1978800

Daily Discharge: 31,600 Gal

AST Pressure: 60.5 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 66 °F

AST water PH 8.90 pH(7.0-9.0)
8.81

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.85
(1.50-2.00)

System Status: ON
(Arrival)

System Status: ON
(Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge _____ #

Surge Counter: 25,178

Remaining Defoamer: 8 gals. +

Run Times

Inlet Pump 2893 Outlet Pump 3127 Booster Blower 5023

AST Blower 5022 MS Pump 2300 Aeration Blower —

AST Pump 1827 Dual Phase 4692

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-20-17 **Time:** _____ **Temp:** 39°

Total Discharge: 1978800 / 1899800 Gal 79000 **Mag Gauge Flow:** 1.75 (1.50-2.00)

Daily Discharge: 26,333 Gal **System Status:** ON (Arrival)

AST Pressure: 61.2 in WC

Dual Phase Vacuum: 20.5 in WC **System Status:** ON (Departure)

Dual Phase Temp: 100 °F **Sample Collected:** NO

XP Room Temp: 64 °F **Bag Filters Replaced:** yes

AST water PH 5.68 / 8.81 pH(7.0-9.0) **Cartridge Filters Replaced:** yes

Inf Bag Filter DP: 0/0 PSI **Remianing Cartridge** _____ #

Eff Bag Filter DP: 0/0 PSI **Surge Counter:** 25,178

Remaining Bag Filters: _____ # **Remaining Defoamer:** 2 gals. will add add 10 gals. full

Run Times

Inlet Pump 2879 Outlet Pump 3107 Booster Blower 4999

AST Blower 4998 MS Pump 2288 Aeration Blower _____

AST Pump 1817 Dual Phase 4669

Maintenance Work Performed, Adjustments Made and Comments:

Booster blower dry?

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-17-17 **Time:** _____ **Temp:** 40°

Total Discharge: 1899800 / 1869200 Gal

Daily Discharge: 30,600 Gal

AST Pressure: 62.0 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 66 °F

AST water PH 10.89 8.25 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: changed on 11-16-17

Remianing Cartridge _____ #

Surge Counter: 25,178

Remaining Defoamer: full

Run Times

Inlet Pump 2835 Outlet Pump 3047 Booster Blower 4927

AST Blower 4926 MS Pump 2253 Aeration Blower ✓

AST Pump 1787 Dual Phase 4597

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-16-17 **Time:** _____ **Temp:** 45°

Total Discharge: 1869200 Gal

Daily Discharge: 0 Gal

AST Pressure: 59.2 in WC

Dual Phase Vacuum: 20.2 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 69 °F

AST water PH 10.89 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.70 (1.50-2.00)

System Status: OFF (Arrival) (*)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: yes

Remianing Cartridge 19 #

Surge Counter: 25,178

Remaining Defoamer: full

Run Times

Inlet Pump 2823 Outlet Pump 3031 Booster Blower 4908

AST Blower 4907 MS Pump 2243 Aeration Blower —

AST Pump 1779 Dual Phase 4578

Maintenance Work Performed, Adjustments Made and Comments:

(*) waiting for acid order to arrive.
acid came in at 12 noon.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-15-17 **Time:** _____ **Temp:** 36°

Total Discharge: 1869200 Gal

Daily Discharge: Ø Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: 37 °F

XP Room Temp: 51° °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: OFF (Arrival)

System Status: OFF (Departure) (*)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 2823

Outlet Pump 3031

Booster Blower 4908

AST Blower 4907

MS Pump 2243

Aeration Blower —

AST Pump 1779

Dual Phase 4578

Maintenance Work Performed, Adjustments Made and Comments:

(*) waiting for acid order to arrive.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-14-17 **Time:** _____ **Temp:** 39°

Total Discharge: _____ Gal
1869200
Daily Discharge: 0 Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: 48 °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 0.0 (1.50-2.00)

System Status: OFF. (Arrival)

System Status: OFF. (Departure) (*)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump 2823 Outlet Pump 3031 Booster Blower 4908

AST Blower 4907 MS Pump 2243 Aeration Blower —

AST Pump 1779 Dual Phase 4578

Maintenance Work Performed, Adjustments Made and Comments:

(*) Waiting for an order of acid to come in.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-13-17 **Time:** _____ **Temp:** 40°

Total Discharge: 1869200 / 1793700 Gal 75,500 ÷3

Daily Discharge: 25,166 Gal

AST Pressure: 59.8 in WC

Dual Phase Vacuum: – in WC

Dual Phase Temp: 67 °F

XP Room Temp: 61 °F

AST water PH 6.85 11.79 (*) pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 200 #

Mag Gauge Flow: 2.0 + (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) OFF.

Sample Collected: yes

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 12 #

Surge Counter: 25,178

Remaining Defoamer: 3 gals

Run Times

Inlet Pump 2823 Outlet Pump 3031 Booster Blower 4907

AST Blower 4906 MS Pump 2243 Aeration Blower —

AST Pump 1779 Dual Phase 4578

Maintenance Work Performed, Adjustments Made and Comments:

(*) cell out of acid - shut cell down.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-10-17 **Time:** 0740 **Temp:** 46°

Total Discharge: 1793700 Gal

Daily Discharge: 24,100 Gal

AST Pressure: 60 in WC

Dual Phase Vacuum: 19.4 in WC

Dual Phase Temp: 96 °F

XP Room Temp: 65 °F

AST water PH 6.85 pH(7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Remaining Bag Filters: 4 boxes=200 #

Mag Gauge Flow: 1.7 (1.50-2.00)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: No

Bag Filters Replaced: Yes

Cartridge Filters Replaced: Yes

Remianing Cartridge 1/2 box #

Surge Counter: 25178

Remaining Defoamer: 1/2 - topped off

Run Times

Inlet Pump 2783 Outlet Pump 2981 Booster Blower 4834

AST Blower 4833 MS Pump 2211 Aeration Blower 0

AST Pump 1754 Dual Phase 4506

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-9-17 **Time:** 0830 **Temp:** 49°

Total Discharge: 1,769,600 Gal

Daily Discharge: 24,100 Gal

AST Pressure: 60 in WC

Dual Phase Vacuum: 19.4 in WC

Dual Phase Temp: 96 °F

XP Room Temp: 65 °F

AST water PH 6.6 pH(7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Remaining Bag Filters: 4 Boxes #

Mag Gauge Flow: 1.7 (1.50-2.00)

System Status: Running (Arrival)

System Status: Running (Departure)

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge ✓ #

Surge Counter: 25,178

Remaining Defoamer: 1/2

Run Times

Inlet Pump 2221 Outlet Pump 2967 Booster Blower 4811

AST Blower 4810 MS Pump 2202 Aeration Blower 0

AST Pump 1747 Dual Phase 4483

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-8-17 **Time:** 0805 **Temp:** 43°

Total Discharge: ~~14362449~~ 1,745,500 ~~17,455,600~~ Gal

Daily Discharge: 22,220 Gal

AST Pressure: 60 in WC

Dual Phase Vacuum: 19.7 in WC

Dual Phase Temp: 96 °F

XP Room Temp: 63 °F

AST water PH 56 pH(7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Remaining Bag Filters: ✓ #

Mag Gauge Flow: 1.30 (1.50-2.00)

System Status: Running (Arrival)

System Status: Running (Departure)

Sample Collected: ~~No~~ Yes

Bag Filters Replaced: No

Cartridge Filters Replaced: No

~~**Remianing Cartridge**~~ ✓

Surge Counter: 25,178

Remaining Defoamer: 3/4 Full

Run Times

Inlet Pump 2759 Outlet Pump 2952 Booster Blower 4786

AST Blower 4785 MS Pump 2191 Aeration Blower 0

AST Pump 1739 Dual Phase 4458

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-7-17 **Time:** 0900 **Temp:** 46°

Total Discharge:	~~14,362,449~~	Gal	**Mag Gauge Flow:**	1.3	(1.50-2.00)
Daily Discharge:	22,220	Gal	**System Status:** (Arrival)	Running	
AST Pressure:	60	in WC	**System Status:** (Departure)	Running	
Dual Phase Vacuum:	19.5	in WC			
Dual Phase Temp:	96	°F	**Sample Collected:**	Yes	
XP Room Temp:	66	°F	**Bag Filters Replaced:**	Yes	
AST water PH	8.1	pH(7.0-9.0)	**Cartridge Filters Replaced:**	No	
Inf Bag Filter DP:	0	PSI	**Remianing Cartridge**	Full	
Eff Bag Filter DP:	0	PSI	**Surge Counter:**		
Remaining Bag Filters:	✓	#	**Remaining Defoamer:**	3/4 Full	

Run Times

Inlet Pump	2748	Outlet Pump	2939	Booster Blower	4763
AST Blower	4763	MS Pump	2182	Aeration Blower	0
AST Pump	1732	Dual Phase	4435		

Maintenance Work Performed, Adjustments Made and Comments:

Need to read off of Analog flow counter

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11/6/17 **Time:** 1050 **Temp:** 60

Total Discharge: ~~14,362,449~~ Gal

Daily Discharge: 22,220 Gal

AST Pressure: 56.6 in WC

Dual Phase Vacuum: 19.5 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 80 °F

AST water PH 6.10 - Watchem + hand held pH(7.0-9.0)

Inf Bag Filter DP: 15/60 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.30 (1.50-2.00)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: Y

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge _____ #

Surge Counter: 25178

Remaining Defoamer: 10 G

Run Times

Inlet Pump 2737 Outlet Pump 2926 Booster Blower 4741

AST Blower 4740 MS Pump 2173 Aeration Blower 0

AST Pump 1725 Dual Phase 4413

Maintenance Work Performed, Adjustments Made and Comments:

- Read Discharge off of HMI, not counting
- Must read off of Analog flow counter

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-3-17 **Time:** _____ **Temp:** 57°

Total Discharge: 1634400 Gal

Daily Discharge: 24,200 Gal

AST Pressure: 58.9 in WC

Dual Phase Vacuum: 19.6 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 75 °F

AST water PH 8.25 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 14 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) ON

System Status: (Departure) ON

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge 23 #

Surge Counter: 25,178

Remaining Defoamer: full

Run Times

Inlet Pump 2702 Outlet Pump 2885 Booster Blower 4667

AST Blower 4666 MS Pump 2144 Aeration Blower —

AST Pump 1702 Dual Phase 4339

Maintenance Work Performed, Adjustments Made and Comments:

filter bag order came in.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-2-17 **Time:** _____ **Temp:** 55°

Total Discharge: 1610200 / 1582200 Gal

Daily Discharge: 28,000 Gal

AST Pressure: 59.1 in WC

Dual Phase Vacuum: 20.3 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 75 °F

AST water PH 8.18 / 7.54 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 20 #

Mag Gauge Flow: 1.50 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 26 #

Surge Counter: 25,178

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 2691 Outlet Pump 2873 Booster Blower 4643

AST Blower 4642 MS Pump 2135 Aeration Blower —

AST Pump 1695 Dual Phase 4315

Maintenance Work Performed, Adjustments Made and Comments:

needs 5 gal. defoamer. . .

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 11-1-17 **Time:** _____ **Temp:** 46°

Total Discharge: 1582200 Gal
1557500

Daily Discharge: 24,700 Gal

AST Pressure: 59.4 in WC

Dual Phase Vacuum: 19.7 in WC

Dual Phase Temp: 97 °F

XP Room Temp: 67 °F

AST water PH 7.54 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 25 #

Mag Gauge Flow: 1.85 (1.50-2.00)

System Status: ON (Arrival)

System Status: ON (Departure)

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge 26 #

Surge Counter: 25,178

Remaining Defoamer: 5 gals.
added 5 gallons

Run Times

Inlet Pump 2675 Outlet Pump 2856 Booster Blower 4619

AST Blower 4618 MS Pump 2122 Aeration Blower —

AST Pump 1685 Dual Phase 4291

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-22-17 **Time:** 0640 **Temp:** 38°

SVE Process Vacuum: 78 in WC

Sparge PSI: 18 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 58 °F

Sparge Room Temp: 48 °F

XP Room Temp: 44 °F

Sparge Run Time: 4910

SVE Run Time: 4912

(Arrival) **System Status:** Running

(Departure) **System Status:** OFF

Air Sample Collected: No

Temp at TI 101: 141

PID at TI 101: 24.6 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13 0	0	19 12	3
2		8		14 11	4	20 13.	5
3		9		15 0	0	21 13.	4
4		10		16 11	6	22 13.	7
5		11		17 12	3	23 13.	5
6		12		18 14	3	24 13	8
						25 6	11

Total cfm: 131

Maintenance Work Performed, Adjustments Made and Comments:

OFF @ 0800

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-21-17 **Time:** 0715 **Temp:** 30°

SVE Process Vacuum: 79 in WC

Sparge PSI: 18 PSI

SVE Process Flow: 3.8 ~~SCFM~~ IN WC

Sparge Temp: 51 °F

Sparge Room Temp: 40 °F

XP Room Temp: 39 °F

Sparge Run Time: 4887

SVE Run Time: 4889

(Arrival) **System Status:** Running

(Departure) **System Status:** Running

Air Sample Collected: No

Temp at TI 101: 140

PID at TI 101: 34.3 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1			7			13	0	6	19	12	4
2			8			14	10	4	20	13	5
3			9			15	0	0	21	14	4
4			10			16	11	6	22	14	7
5			11			17	12	3	23	13	5
6			12			18	14	5	24	13	7
									25	6	11

Total cfm: 132

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-20-17 **Time:** 0620 **Temp:** 49°

SVE Process Vacuum: 74 in WC

Sparge PSI: 17 PSI

SVE Process Flow: 3.7 ~~SCFM~~ in wc

Sparge Temp: 73 °F

Sparge Room Temp: 59 °F

XP Room Temp: 53 °F

Sparge Run Time: 4862

SVE Run Time: 4864

(Arrival) **System Status:** Running

(Departure) **System Status:** Running

Air Sample Collected: No

Temp at TI 101: 148

PID at TI 101: 45.3 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13 0	0	19 12	3
2		8		14 10	4	20 13	5
3		9		15 0	0	21 13	4
4		10		16 11	6	22 13	7
5		11		17 11	3	23 13	5
6		12		18 14	5	24 12	7
						25 5	10

Total cfm: ~~117~~ 127

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-19-17 **Time:** 0650 **Temp:** ~~5~~ 43

SVE Process Vacuum: 75 in WC

Sparge PSI: 17.5 PSI

SVE Process Flow: 3.7 ~~SCFM~~ in WC

Sparge Temp: 65 °F

Sparge Room Temp: 57 °F

XP Room Temp: 52 °F

Sparge Run Time: 4839

SVE Run Time: 4841

(Arrival) **System Status:** Running

(Departure) **System Status:** Running

Air Sample Collected: No

Temp at TI 101: 142

PID at TI 101: 37.2 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1			7			13	0	1	19	12	3
2			8			14	10	4	20	13	5
3			9			15	7	0	21	13	4
4			10			16	11	6	22	14	7
5			11			17	11	3	23	13	5
6			12			18	14	5	24	12	7
									25	5	11

Total cfm: 128

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-18-17 **Time:** 0730 **Temp:** 37°

SVE Process Vacuum:	2.2	in WC	(Arrival) **System Status:**	OFF	
Sparge PSI:	0.3	PSI	(Departure) **System Status:**	Running	
SVE Process Flow:	0	SCFM	**Air Sample Collected:**	No	
Sparge Temp:	45	°F	**Temp at TI 101:**	140	
Sparge Room Temp:	51	°F	**PID at TI 101:**	0.2	ppm
XP Room Temp:	52	°F	**PID at MID Carbon:**	0	ppm
Sparge Run Time:	4818		**PID at EFF Carbon:**	6	ppm
SVE Run Time:	4820		**Surge Counter:**	NA	

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13 6	2	19 12	4
2		8		14 11	4	20 13	7
3		9		15 6	0	21 14	5
4		10		16 9	9	22 12	9
5		11		17 12	4	23 13	6
6		12		18 14	5	24 12	10
						25 0	13

Total cfm: 120

Maintenance Work Performed, Adjustments Made and Comments:

MS tank High level upon arrival - Cleared

Restarted @ 0900

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-15-17 **Time:** 0700 **Temp:** 27°

SVE Process Vacuum: 4.8/83 in WC

Sparge PSI: 0/19 PSI

SVE Process Flow: 0/38 SCFM

Sparge Temp: 32 °F

Sparge Room Temp: 35 °F

XP Room Temp: 39 °F

Sparge Run Time: 4781

SVE Run Time: 4783

(Arrival) **System Status:** OFF

(Departure) **System Status:** Running

Air Sample Collected: No

Temp at TI 101: 110

PID at TI 101: 0.7 ppm

PID at MID Carbon: C ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1			7			13	0	0	19	13	4
2			8			14	12	5	20	13	6
3			9			15	0	0	21	14	5
4			10			16	10	8	22	14	9
5			11			17	12	4	23	13	6
6			12			18	15	5	24	12	10
									25	12	4

Total cfm: 140

Maintenance Work Performed, Adjustments Made and Comments:

SVE VFD Fault
Sparge VFD Fault > Due to power outage

Reset VFDs @ 0800

Reduced cfm total back below 140

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-14-17 **Time:** 0740 **Temp:** 37

SVE Process Vacuum: 75 in WC

Sparge PSI: 18 PSI

SVE Process Flow: 36. SCFM

Sparge Temp: 68 °F

Sparge Room Temp: 48 °F

XP Room Temp: 49 °F

Sparge Run Time: 4779

SVE Run Time: 4781

(Arrival) **System Status:** OFF

(Departure) **System Status:** Running @ 1230

Air Sample Collected: No

Temp at TI 101: 147

PID at TI 101: 43.4 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13 6	1	19 13	3
2		8		14 12	4	20 13	5
3		9		15 6	0	21 14	5
4		10		16 12	7	22 15	7
5		11		17 12	4	23 13	5
6		12		18 15	5	24 13	8
						25 5	10

Total cfm: 137

Maintenance Work Performed, Adjustments Made and Comments:

Power Loss @ 1747 on 12/13

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-13-17 **Time:** 0730 **Temp:** 23°

SVE Process Vacuum: 95 in WC

Sparge PSI: 17.6 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 47 °F

Sparge Room Temp: 33 °F

XP Room Temp: 30 °F

Sparge Run Time: 4769

SVE Run Time: 4771

PI 101 16

(Arrival) **System Status:** Running

(Departure) **System Status:** Running

Air Sample Collected: No

Temp at TI 101: 148

PID at TI 101: ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1			7			13	8	0	19	13	4
2			8			14	12	4	20	13	5
3			9			15	6	6	21	13	5
4			10			16	12	7	22	14	6
5			11			17	12	3	23	13	5
6			12			18	13	4	24	12	7
									25	5	9

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-12-17 **Time:** 0640 **Temp:** 42°

SVE Process Vacuum: 75 in WC

Sparge PSI: 15.7 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 62 °F

Sparge Room Temp: 52 °F

XP Room Temp: 48 °F

Sparge Run Time: 4743

SVE Run Time: 4745

(Arrival) **System Status:** Running

(Departure) **System Status:** Running

Air Sample Collected: No

Temp at TI 101: 148

PID at TI 101: 28.4 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

cfm	psi	cfm	psi	cfm	psi	cfm	psi
1		7		13 0	0	19 15	4
2		8		14 15	4	20 14	5
3		9		15 0	0	21 16	5
4		10		16 12	7	22 13	7
5		11		17 16	3	23 12	5
6		12		18 13	4	24 10	7
						25 4	8

Total cfm: 140

Maintenance Work Performed, Adjustments Made and Comments:

Too high on cfm – lowered

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-11-17 **Time:** 0855 **Temp:** 37°

SVE Process Vacuum: 71.2 in WC

Sparge PSI: 14.3 PSI

SVE Process Flow: 4 SCFM

Sparge Temp: 59 °F

Sparge Room Temp: 50 °F

XP Room Temp: 54 °F

Sparge Run Time: 4725

SVE Run Time: 4727

(Arrival) **System Status:** OFF

(Departure) **System Status:** OFF - Draining

Air Sample Collected: No

Temp at TI 101: 140

PID at TI 101: 0 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1			7			13	0	0	19	18	4
2			8			14	13	4	20	12	5
3			9			15	0	0	21	13	5
4			10			16	13	7	22	12	6
5			11			17	14	3	23	9	6
6			12			18	10	5	24	11	7
									25	5	8

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

MS tank high level

Drained and restarted 1200

CFM too high

Lowered

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/8/17 **Time:** 1520 **Temp:** 39

SVE Process Vacuum: 76.4 in WC

Sparge PSI: 14.7 PSI

SVE Process Flow: 4.0 SCFM

Sparge Temp: 65 °F

Sparge Room Temp: 55 °F

XP Room Temp: 60 °F

Sparge Run Time: 4695

SVE Run Time: 4697

(Arrival) **System Status:** On

(Departure) **System Status:** On

Air Sample Collected: N

Temp at TI 101: 150

PID at TI 101: ppm

PID at MID Carbon: ppm

PID at EFF Carbon: ppm

Surge Counter:

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	0	2	13	0	3	19	18	4
2	0	0	8	0	0	14	13	4	20	15	5
3	0	0	9	0	0	15	0	0	21	15	5
4	0	0	10	0	0	16	13	7	22	12	6
5	0	2	11	0	1	17	15	3	23	10	5
6	0	0	12	0	0	18	11	5	24	10	7
									25	5	8

Total cfm:

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/7/17 **Time:** 1100 **Temp:** 37

SVE Process Vacuum: 73.0 in WC

Sparge PSI: 14.6 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 70 °F

Sparge Room Temp: 55 °F

XP Room Temp: 56 °F

Sparge Run Time: 4671

SVE Run Time: 4673

(Arrival) **System Status:** On

(Departure) **System Status:** On

Air Sample Collected: N

Temp at TI 101: 155

PID at TI 101: ppm

PID at MID Carbon: ppm

PID at EFF Carbon: ppm

Surge Counter:

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	0	2	13	0	2	19	17	4
2	0	3	8	0	0	14	14	5	20	13	5
3	0	0	9	0	0	15	0	0	21	14	5
4	0	0	10	0	0	16	12	7	22	12	7
5	0	2	11	0	1	17	15	3	23	11	5
6	0	0	12	0	0	18	12	5	24	10	7
									25	4	8

Total cfm:

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/6/17 **Time:** 1045 **Temp:** 37

SVE Process Vacuum: 74.6 in WC

Sparge PSI: 16.1 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 68 °F

Sparge Room Temp: 55 °F

XP Room Temp: 64 °F

Sparge Run Time: 4647

SVE Run Time: 4649

(Arrival) **System Status:** O.

(Departure) **System Status:** O.

Air Sample Collected: N

Temp at TI 101: 148°F

PID at TI 101: ppm

PID at MID Carbon: ppm

PID at EFF Carbon: ppm

Surge Counter:

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	0	2	13	0	2	19	17	4
2	0	3	8	0	0	14	15	4	20	13	5
3	0	0	9	0	0	15	0	0	21	16	5
4	0	0	10	0	0	16	12	7	22	12	7
5	0	2	11	0	0	17	15	4	23	11	5
6	0	0	12	0	0	18	13	5	24	10	7
									25	4	8

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/5/17 **Time:** 1440 **Temp:** 55

SVE Process Vacuum: 71.5 in WC

Sparge PSI: 14.1 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 78 °F

Sparge Room Temp: 68 °F

XP Room Temp: 62 °F

Sparge Run Time: 4622

SVE Run Time: ~~4~~ 4624

(Arrival) **System Status:** On

(Departure) **System Status:** On

Air Sample Collected: N

Temp at TI 101: 160

PID at TI 101: ppm

PID at MID Carbon: ppm

PID at EFF Carbon: ppm

Surge Counter:

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	0	2	13	0	2	19	15	4
2	0	2	8	0	0	14	13	4	20	11	5
3	0	0	9	0	0	15	0	0	21	14	5
4	0	0	10	0	0	16	10	6	22	10	6
5	0	2	11	0	1	17	13	3	23	9	5
6	0	0	12	0	0	18	10	5	24	9	6
									25	4	6

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-4-17 **Time:** _____ **Temp:** 33°

SVE Process Vacuum: 27.2 in WC

Sparge PSI: 6.9 PSI

SVE Process Flow: 1.0 SCFM

Sparge Temp: 63 °F

Sparge Room Temp: 59 °F

XP Room Temp: 52 °F

Sparge Run Time: 5269

SVE Run Time: 5296

(Arrival) **System Status:** OFF (*)

(Departure) **System Status:** ON

Air Sample Collected: NO

Temp at TI 101: 144°

PID at TI 101: 31.6 ppm

PID at MID Carbon: 2.5 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
~~1~~			~~7~~			~~13~~			19	15	4
~~2~~			~~8~~			14	13	4	20	10	5
~~3~~			~~9~~			15	OF	F	21	14	5
~~4~~			~~10~~			16	10	6	22	12	6
~~5~~			~~11~~			17	13	3	23	10	4
~~6~~			~~12~~			18	11	4	24	9	6
									25	4	7

Total cfm: 121

Maintenance Work Performed, Adjustments Made and Comments:

(*) Moisture separator high level alarm. 12/3/17 02:36

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-1-17 **Time:** _____ **Temp:** 43°

SVE Process Vacuum: 75.4 in WC

Sparge PSI: 15.3 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 68 °F

Sparge Room Temp: 59 °F

XP Room Temp: 57 °F

Sparge Run Time: 4524

SVE Run Time: 4526

(Arrival) **System Status:** on

(Departure) **System Status:** on

Air Sample Collected: yes

Temp at TI 101: 146°

PID at TI 101: 33.8 ppm

PID at MID Carbon: 2.8 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
~~1~~			~~7~~			~~13~~			19	15	4
~~2~~			~~8~~			14	13	4	20	10	5
~~3~~			~~9~~			15	OFF		21	14	5
~~4~~			~~10~~			16	10	6	22	12	6
~~5~~			~~11~~			17	13	3	23	10	4
~~6~~			~~12~~			18	11	4	24	9	6
									25	4	7.0

Total cfm: 121

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-30-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 76.9 in WC

Sparge PSI: 14.9 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 59 °F

Sparge Room Temp: 53 °F

XP Room Temp: 56 °F

Sparge Run Time: 4500

SVE Run Time: 4502

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: Yes

Temp at TI 101: 156°

PID at TI 101: 31.3 ppm

PID at MID Carbon: 1.3 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
~~1~~			~~7~~			~~13~~			19	15	4
~~2~~			~~8~~			14	13	4	20	11	5
~~3~~			~~9~~			15	OFF		21	14	5
~~4~~			~~10~~			16	10	6	22	12	6
~~5~~			~~11~~			17	13	3	23	10	4
~~6~~			~~12~~			18	11	4	24	9	6
									25	4	7.5

Total cfm: 122

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-29-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 75.9 in WC

Sparge PSI: 14.1 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 66 °F

Sparge Room Temp: 69 °F

XP Room Temp: 66 °F

Sparge Run Time: 4475

SVE Run Time: 4477

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 166°

PID at TI 101: 103.9 ppm

PID at MID Carbon: 5.4 ppm

PID at EFF Carbon: 1.1 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
~~1~~			~~7~~			~~13~~			19	15	4
~~2~~			~~8~~			14	13	4	20	11	5
~~3~~			~~9~~			15	OFF		21	14	5
~~4~~			~~10~~			16	10	6	22	11	6
~~5~~			~~11~~			17	13	4	23	10	5
~~6~~			~~12~~			18	11	5	24	9	6
									25	4	7.5

Total cfm: 121

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-28-17 **Time:** _____ **Temp:** 38°

SVE Process Vacuum: 77.6 in WC

Sparge PSI: 15.7 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 56 °F

Sparge Room Temp: 53 °F

XP Room Temp: 55 °F

Sparge Run Time: 4451

SVE Run Time: 4453

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 156°

PID at TI 101: 14.5 ppm

PID at MID Carbon: 0.4 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	10	6	13	9	5	19		
2	13	6	8	20	6	14			20		
3	9	4	9	9	7.5	15			21		
4	7	7.5	10	8	5	16			22		
5	5	9	11	9	2.5	17			23		
6	14	5	12	9	2.5	18			24		
									25		

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Switch wells
1-13 turned off
14-25 turned on

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-27-17 **Time:** _____ **Temp:** 43°

SVE Process Vacuum: 13.9 in WC

Sparge PSI: 17.4 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 58 °F

Sparge Room Temp: 54 °F

XP Room Temp: 61 °F

Sparge Run Time: 4431

SVE Run Time: 4433

(Arrival) **System Status:** OFF *

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 158°

PID at TI 101: 0 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	10	6	13	9	5	~~19~~		
2	13	6	8	17	5	~~14~~			~~20~~		
3	9	4	9	9	7.5	~~15~~			~~21~~		
4	8	7.0	10	8	6	~~16~~			~~22~~		
5	5	9	11	9	3	~~17~~			~~23~~		
6	13	4	12	9	3	~~18~~			~~24~~		
									~~25~~		

Total cfm: 119.

Maintenance Work Performed, Adjustments Made and Comments:

M/S tank needed to be drained

* moisture seperator high level alarm

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-22-17 **Time:** _____ **Temp:** 52°

SVE Process Vacuum: 73.5 in WC

Sparge PSI: 15.5 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 78 °F

Sparge Room Temp: 65 °F

XP Room Temp: 63 °F

Sparge Run Time: 4343

SVE Run Time: 4345

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 160°

PID at TI 101: 1.5 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	10	6	13	9	5	~~19~~		
2	13	6	8	17	5	~~14~~			~~20~~		
3	9	4	9	9	7.5	~~15~~			~~21~~		
4	8	7.5	10	8	5	~~16~~			~~22~~		
5	5	9	11	9	2.5	~~17~~			~~23~~		
6	13	4	12	9	2.5	~~18~~			~~24~~		
									~~25~~		

Total cfm: 119.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-21-17 **Time:** _____ **Temp:** 42°

SVE Process Vacuum: 77.4 in WC

Sparge PSI: 16.4 PSI

SVE Process Flow: 3.9 SCFM

Sparge Temp: 63 °F

Sparge Room Temp: 63 °F

XP Room Temp: 61 °F

Sparge Run Time: 4319

SVE Run Time: 4321

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 160°

PID at TI 101: 2.2. ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	10	6.5	13	9	5	~~19~~		
2	13	6	8	10	4	~~14~~			~~20~~		
3	9	4	9	9	7.5	~~15~~			~~21~~		
4	8	7.5	10	9	5	~~16~~			~~22~~		
5	5	9	11	9	3	~~17~~			~~23~~		
6	14	5	12	10	2.5	~~18~~			~~24~~		
									~~25~~		

Total cfm: 117

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-20-17 **Time:** _____ **Temp:** 39°

SVE Process Vacuum:	73.6	in WC	(Arrival) **System Status:**	OFF	
Sparge PSI:	17.2	PSI	(Departure) **System Status:**	ON	
SVE Process Flow:	3.8	SCFM	**Air Sample Collected:**	yes	
Sparge Temp:	65	°F	**Temp at TI 101:**	154°	
Sparge Room Temp:	53	°F	**PID at TI 101:**	1.2	ppm
XP Room Temp:	57	°F	**PID at MID Carbon:**	0.0	ppm
Sparge Run Time:	4299		**PID at EFF Carbon:**	0.0	ppm
SVE Run Time:	4301		**Surge Counter:**	N/A	

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	9	7.5	13	9	5			
2	12	7.5	8	11	5.0						
3	10	5.0	9	9	9						
4	7	10.0	10	9	5						
5	4	10.0	11	10	4						
6	14	5.0	12	10	2.5						

Total cfm: 114

Maintenance Work Performed, Adjustments Made and Comments:

drained the m/s tank - reset the alarm

#5 needle bouncing

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-17-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 77.1 in WC

Sparge PSI: 16.0 PSI

SVE Process Flow: 3.9 SCFM

Sparge Temp: 63 °F

Sparge Room Temp: 61 °F

XP Room Temp: 63 °F

Sparge Run Time: 4277

SVE Run Time: 4279

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 160°

PID at TI 101: 5.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	11	6	13	9	5.0	~~19~~		
2	7	5	8	11	4	~~14~~			~~20~~		
3	10	4	9	11	7.5	~~15~~			~~21~~		
4	9	7.5	10	9	5	~~16~~			~~22~~		
5	8	10	11	10	2.5	~~17~~			~~23~~		
6	10	5	12	10	2.5	~~18~~			~~24~~		
									~~25~~		

Total cfm: 115.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-16-17 **Time:** _____ **Temp:** 45°

SVE Process Vacuum: 74.6 in WC

Sparge PSI: 15.0 PSI

SVE Process Flow: 3.5 SCFM

Sparge Temp: 67 °F

Sparge Room Temp: 64 °F

XP Room Temp: 60 °F

Sparge Run Time: 4252

SVE Run Time: 4254

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 160°

PID at TI 101: 5.2 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	11	6.5	13	9.5	5	~~19~~		
2	7	5	8	11	4.5	~~14~~			~~20~~		
3	10	4	9	11	8.0	~~15~~			~~21~~		
4	9	7.5	10	9	5	~~16~~			~~22~~		
5	8	10	11	10	2.5	~~17~~			~~23~~		
6	10	4.5	12	10	2.5	~~18~~			~~24~~		
									~~25~~		

Total cfm: 115.5

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-15-17 **Time:** _____ **Temp:** 36°

SVE Process Vacuum:	77.8	in WC	(Arrival) **System Status:**	ON	
Sparge PSI:	17.0	PSI	(Departure) **System Status:**	ON	
SVE Process Flow:	3.5	SCFM	**Air Sample Collected:**	yes	
Sparge Temp:	55	°F	**Temp at TI 101:**	152°	
Sparge Room Temp:	50	°F	**PID at TI 101:**	3.8	ppm
XP Room Temp:	49	°F	**PID at MID Carbon:**	0.0	ppm
Sparge Run Time:	4228		**PID at EFF Carbon:**	0.0	ppm
SVE Run Time:	4230		**Surge Counter:**	NA	

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	11	6	13	10	5	~~19~~		
2	7	5	8	11	4	~~14~~			~~20~~		
3	10	4	9	11	8	~~15~~			~~21~~		
4	9	7.5	10	10	5	~~16~~			~~22~~		
5	8	10	11	10	3	~~17~~			~~23~~		
6	10.5	4	12	10	2.5	~~18~~			~~24~~		
									~~25~~		

Total cfm: 117.5

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-14-17 **Time:** _____ **Temp:** 39°

SVE Process Vacuum: 77.0 in WC

Sparge PSI: 18.4 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 64 °F

Sparge Room Temp: 55 °F

XP Room Temp: 51 °F

Sparge Run Time: 4205

SVE Run Time: 4207

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 150°

PID at TI 101: 14.9 ppm

PID at MID Carbon: 0.1 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	12	7.5	13	10.5	6	19		
2	9	5	8	11	4	14			20		
3	8	4	9	13	10	15			21		
4	10	9	10	11	6	16			22		
5	11	12.5	11	11	4	17			23		
6	12	5	12	12	3.5	18			24		
									25		

Total cfm: 130.5

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-13-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 74.4 in WC

Sparge PSI: 20.4 PSI

SVE Process Flow: 3.8 SCFM

Sparge Temp: 58 °F

Sparge Room Temp: 49 °F

XP Room Temp: 57 °F

Sparge Run Time: 4186

SVE Run Time: 4188

(Arrival) **System Status:** OFF

(Departure) **System Status:** ON

Air Sample Collected: yes.

Temp at TI 101: 154

PID at TI 101: 1.2 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	10	10	13	11	7.5	~~19~~		
2	8.5	7.5	8	12	5	~~14~~			~~20~~		
3	8.5	4.5	9	12	13	~~15~~			~~21~~		
4	8.0	12.5	10	12	7.5	~~16~~			~~22~~		
5	8.0	15.0	11	11	5	~~17~~			~~23~~		
6	12.0	5	12	12	3	~~18~~			~~24~~		
									~~25~~		

Total cfm: 125

Maintenance Work Performed, Adjustments Made and Comments:

SVE VFD fault alarm

drained tank of water

Sparge mtr. HRTZ. jumping between 39 & 40 hertz

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-10-17 **Time:** 0715 **Temp:** 45°

SVE Process Vacuum: 12 in WC

Sparge PSI: 20 PSI

SVE Process Flow: 3.5 / SCFM

Sparge Temp: 51 °F

Sparge Room Temp: 48 °F

XP Room Temp: 52 °F

Sparge Run Time: 4184

SVE Run Time: 4186

(Arrival) **System Status:** Running

(Departure) **System Status:** Running

Air Sample Collected: No

Temp at TI 101: 130

PID at TI 101: 0 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	9	11	13	10	7	19		
2	7	7	8	10	8	14			20		
3	8	5	9	10	13	15			21		
4	6	11	10	11	7	16			22		
5	9	14	11	10	5	17			23		
6	11	6	12	12	3	18			24		
									25		

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

Ms tank High level - Cleared

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-9-17 **Time:** 0820 **Temp:** 48°

SVE Process Vacuum: 75.8 in WC

Sparge PSI: 18 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 64 °F

Sparge Room Temp: 56 °F

XP Room Temp: 53 °F

Sparge Run Time: 4160

SVE Run Time: 4162

(Arrival) **System Status:** Running

(Departure) **System Status:** Running

Air Sample Collected: No

Temp at TI 101: 150

PID at TI 101: 4.1 ppm

PID at MID Carbon: 0 ppm

PID at EFF Carbon: 0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	11	7	13	10	5	19		
2	8	5	8	11	4	14			20		
3	7	3	9	13	10	15			21		
4	7	7	10	11	5	16			22		
5	11	11	11	10	3	17			23		
6	11	4	12	11	3	18			24		
									25		

Total cfm: 120

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-8-17 **Time:** 0745 **Temp:** 39°

SVE Process Vacuum: 76.2 in WC

Sparge PSI: 18 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 61 °F

Sparge Room Temp: 53 °F

XP Room Temp: 51 °F

Sparge Run Time: 4637

SVE Run Time: 4639

(Arrival) **System Status:** Running

(Departure) **System Status:** Running

Air Sample Collected: No

Temp at TI 101: 150

PID at TI 101: 19 ppm

PID at MID Carbon: – ppm

PID at EFF Carbon: – ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	11	7	13	10	5	19		
2	8	5	8	11	4	14			20		
3	7	3	9	13	10	15			21		
4	7	7	10	11	5	16			22		
5	11	11	11	10	3	17			23		
6	11	4	12	10	3	18			24		
									25		

Total cfm: 120

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-7-17 **Time:** 0840 **Temp:** 46

SVE Process Vacuum: 75 in WC

Sparge PSI: 18.4 PSI

SVE Process Flow: 3.8 ~~SCFM~~ in WC

Sparge Temp: 64 °F

Sparge Room Temp: 55 °F

XP Room Temp: 53 °F

Sparge Run Time: 4113

SVE Run Time: 4115

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: No

Temp at TI 101: 150

PID at TI 101: - ppm

PID at MID Carbon: - ppm

PID at EFF Carbon: - ppm

Surge Counter: N/A

P 1101 20 in WC

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	11	8	13	11	5	19		
2	8	5	8	11	4	14			20		
3	6	3	9	13	10	15			21		
4	7	7	10	11	5	16			22		
5	11	12	11	10	3	17			23		
6	11	6	12	11	3	18			24		
									25		

Total cfm: 121

Maintenance Work Performed, Adjustments Made and Comments:

One of the monitoring wells on the Northern end foaming out of top of casing. Closed valves on sparge lines to reduce SCFM

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11/6/17 **Time:** 1035 **Temp:** 60

SVE Process Vacuum: 68.4 in WC

Sparge PSI: 13.3 PSI

SVE Process Flow: 3.6 SCFM

Sparge Temp: 81 °F

Sparge Room Temp: 78 °F

XP Room Temp: 75 °F

Sparge Run Time: 4091

SVE Run Time: 4093

(Arrival) **System Status:** On

(Departure) **System Status:** On

Air Sample Collected: N

Temp at TI 101: 170

PID at TI 101: 32.8 ppm

PID at MID Carbon: 0.4 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: Broken Screen

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	0	0	7	6	7	13	14	6	19	0	0
2	13	6	8	20	6	14	0	0	20	0	2
3	0	0	9	8	7	15	0	0	21	0	0
4	6	8	10	15	7	16	0	0	22	0	0
5	4	8	11	21	6	17	0	0	23	0	0
6	20	6	12	23	5	18	0	0	24	0	0
									25	0	0

Total cfm: _____

Maintenance Work Performed, Adjustments Made and Comments:

MS High Level Alarm @2:34 AM → Off @8:54 AM

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-3-17 **Time:** _____ **Temp:** 57°

SVE Process Vacuum: 72.5 in WC

Sparge PSI: 13.1 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 76 °F

Sparge Room Temp: 78 °F

XP Room Temp: 76 °F

Sparge Run Time: 4045

SVE Run Time: 4047

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: yes

Temp at TI 101: 170°

PID at TI 101: 7.3 ppm

PID at MID Carbon: 0.0 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA.

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	7	6	13	14	5	19		
2	13	6	8	17	5	14			20		
3	15	5	9	7	6	15			21		
4	7	7.5	10	14	6	16			22		
5	4.5	7.5	11	19	5	17			23		
6	18	5.5	12	20	5	18			24		
									25		

Total cfm: 155.5

Maintenance Work Performed, Adjustments Made and Comments:

Cell 1 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-2-17 **Time:** _____ **Temp:** 55°

SVE Process Vacuum: 73.0 in WC

Sparge PSI: 12.5 PSI

SVE Process Flow: 3.7 SCFM

Sparge Temp: 74 °F

Sparge Room Temp: 69 °F

XP Room Temp: 64 °F

Sparge Run Time: 4021

SVE Run Time: 4023

(Arrival) **System Status:** ON

(Departure) **System Status:** ON

Air Sample Collected: NO

Temp at TI 101: 164°

PID at TI 101: 18.6 ppm

PID at MID Carbon: 0.7 ppm

PID at EFF Carbon: 0.0 ppm

Surge Counter: NA

	cfm	psi		cfm	psi		cfm	psi		cfm	psi
1	OFF		7	8	6	13	14	6	19		
2	13	6.5	8	17.5	6	14			20		
3	14	6	9	8	6	15			21		
4	8	7.5	10	14	6.5	16			22		
5	5.5	7.5	11	19	5	17			23		
6	18	6	12	20	5	18			24		
									25		

Total cfm: 159

Maintenance Work Performed, Adjustments Made and Comments:

wells that are on.

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-22-17 **Time:** 0650 **Temp:** 38°

SVE Process Vacuum: 36 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.2 PSI

Sparge Temp: 59 °F

Sparge Room Temp: 49 °F

XP Room Temp: 82 °F

System Status: (Arrival) Running

System Status: (Departure) OFF

Air Sample Collected: No

Sparge Run Time: 4389

SVE Run Time: 5962

Surge Counter: 365

Maintenance Work Performed, Adjustments Made and Comments:

off @ 0830

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12.21-17 **Time:** 07 **Temp:** 31°

SVE Process Vacuum: 38 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.2 PSI

Sparge Temp: 56 °F

Sparge Room Temp: 47 °F

XP Room Temp: 78 °F

System Status: Running (Arrival)

System Status: Running (Departure)

Air Sample Collected: No

Sparge Run Time: 4366

SVE Run Time: 5739

Surge Counter: 365

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-20-17 **Time:** 0630 **Temp:** 49°

SVE Process Vacuum: 38 in WC

SVE Process Flow: ~~38~~ 0.3 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 66 °F

Sparge Room Temp: 57 °F

XP Room Temp: 79 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

Sparge Run Time: 4342

SVE Run Time: 5715

Surge Counter: 365

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-19-17 **Time:** 0700 **Temp:** ~~[illegible]~~ 43°

SVE Process Vacuum: 35 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.2 PSI

Sparge Temp: 64 °F

Sparge Room Temp: 54 °F

XP Room Temp: 84 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

Sparge Run Time: ~~[illegible]~~ 4318

SVE Run Time: 5691

Surge Counter: ~~[illegible]~~ 365

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-18-17 **Time:** 0745 **Temp:** 37°

SVE Process Vacuum: 37 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.2 PSI

Sparge Temp: 58 °F

Sparge Room Temp: 48 °F

XP Room Temp: 81 °F

System Status: Running (Arrival)

System Status: Running (Departure)

Air Sample Collected: No

Sparge Run Time: 4294

SVE Run Time: 5667

Surge Counter: 365

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-15-17 **Time:** 0715 **Temp:** 27°

SVE Process Vacuum: 58 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 33 °F

Sparge Room Temp: 34 °F

XP Room Temp: 30 °F

System Status: (Arrival) Off

System Status: (Departure) Running

Air Sample Collected: No

Sparge Run Time: 4222

SVE Run Time: 5595

Surge Counter: 364

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-14-17 **Time:** 0730 **Temp:** 37°

SVE Process Vacuum: 43.4 in WC

SVE Process Flow: 0.2 ~~SCFM~~ in WC

Sparge PSI: 4.4 PSI

Sparge Temp: 58 °F

Sparge Room Temp: 47 °F

XP Room Temp: 56 °F

System Status: (Arrival) OFF

System Status: (Departure) Running @ 1230

Air Sample Collected: No

Sparge Run Time: 4220

SVE Run Time: 5593

Surge Counter: 362

Maintenance Work Performed, Adjustments Made and Comments:

Power Loss @ 1747 on 12/13

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-13-17 **Time:** 0745 **Temp:** 24°

SVE Process Vacuum: 44 in WC

SVE Process Flow: 0.1 ~~SCFM~~ in WC

Sparge PSI: 4.3 PSI

Sparge Temp: 46 °F

Sparge Room Temp: 34 °F

XP Room Temp: 38 °F

System Status: Running (Arrival)

System Status: Running (Departure)

Air Sample Collected: No

Sparge Run Time: 4211

SVE Run Time: 5584

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-12-17 **Time:** 0655 **Temp:** 43°

SVE Process Vacuum: 35 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 63 °F

Sparge Room Temp: 53 °F

XP Room Temp: 83 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

Sparge Run Time: 4185

SVE Run Time: 5558

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Reduced sparge

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-11-17 **Time:** 0910 **Temp:** 38°

SVE Process Vacuum: 39.2 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 61 °F

Sparge Room Temp: 51 °F

XP Room Temp: 77 °F

System Status: Running (Arrival)

System Status: Running (Departure)

Air Sample Collected: No

Sparge Run Time: 4163

SVE Run Time: 5536

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/8/17 **Time:** 1520 **Temp:** 39

SVE Process Vacuum: 38.9 in WC

SVE Process Flow: 0.0 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 60 °F

Sparge Room Temp: 50 °F

XP Room Temp: 62 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 4097

SVE Run Time: 5470

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/7/16 **Time:** 1015 **Temp:** 39

SVE Process Vacuum: 40.6 in WC

SVE Process Flow: 0.0 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 67 °F

Sparge Room Temp: 55 °F

XP Room Temp: 64 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 4073

SVE Run Time: 5446

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/6/17 **Time:** 1125 **Temp:** 45

SVE Process Vacuum: 37.2 in WC

SVE Process Flow: 0.0 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 65 °F

Sparge Room Temp: 53 °F

XP Room Temp: 70 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 4049

SVE Run Time: 5422

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/5/17 **Time:** 1339 **Temp:** 55

SVE Process Vacuum: 37.1 in WC

SVE Process Flow: 0.1 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 77 °F

Sparge Room Temp: 67 °F

XP Room Temp: 84 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 4025

SVE Run Time: 5398

Surge Counter: ~~284~~ 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-4-17 **Time:** _____ **Temp:** 33°

SVE Process Vacuum: 37.8 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 69 °F

Sparge Room Temp: 45 °F

XP Room Temp: 50 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

Sparge Run Time: 4001

SVE Run Time: 5347

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-1-17 **Time:** _____ **Temp:** 43°

SVE Process Vacuum: 37.3 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.2 PSI

Sparge Temp: 74 °F

Sparge Room Temp: 57 °F

XP Room Temp: 85 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: NO

Sparge Run Time: 3926

SVE Run Time: 5299

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-30-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 39.8 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 63 °F

Sparge Room Temp: 59 °F

XP Room Temp: 83 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3897

SVE Run Time: 5270

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-29-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 41.4 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 64 °F

Sparge Room Temp: 65 °F

XP Room Temp: 84 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

Sparge Run Time: 3872

SVE Run Time: 5245

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-28-17 **Time:** _____ **Temp:** 38°

SVE Process Vacuum: 39.4 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 61 °F

Sparge Room Temp: 56 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3850

SVE Run Time: 5221

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-27-17 **Time:** _____ **Temp:** 43°

SVE Process Vacuum: 40.3 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 62 °F

Sparge Room Temp: 61 °F

XP Room Temp: 79 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3825

SVE Run Time: 5198

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-22-17 **Time:** _____ **Temp:** 52°

SVE Process Vacuum: 38.8 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 71 °F

Sparge Room Temp: 64 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3705

SVE Run Time: 5078

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-21-17 **Time:** _____ **Temp:** 42°

SVE Process Vacuum: 40.1 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 63 °F

Sparge Room Temp: 63 °F

XP Room Temp: 77 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3681

SVE Run Time: 5054

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-20-17 **Time:** _____ **Temp:** 39°

SVE Process Vacuum: 40.7 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.3 PSI

Sparge Temp: 58 °F

Sparge Room Temp: 55 °F

XP Room Temp: 65 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3657

SVE Run Time: 5030

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-17-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 40.9 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 62 °F

Sparge Room Temp: 60 °F

XP Room Temp: 78 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3585

SVE Run Time: 4958

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-16-17 **Time:** _____ **Temp:** 45°

SVE Process Vacuum: 38.6 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 65 °F

Sparge Room Temp: 61 °F

XP Room Temp: 80 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3560

SVE Run Time: 4833

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-15-17 **Time:** _____ **Temp:** 36°

SVE Process Vacuum: 36.3 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 58 °F

Sparge Room Temp: 54 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3536

SVE Run Time: 4909

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-14-17 Time: _____ Temp: 39°

SVE Process Vacuum: 38.4 in WC

SVE Process Flow: 0.5 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 62 °F

Sparge Room Temp: 59 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3513

SVE Run Time: 4886

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-13-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 36.1 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 60 °F

Sparge Room Temp: 58 °F

XP Room Temp: 83 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3490

SVE Run Time: 4863

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-10-16 **Time:** 0745 **Temp:** 45

SVE Process Vacuum: 40 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 64 °F

Sparge Room Temp: 56 °F

XP Room Temp: 74 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

Sparge Run Time: 3418

SVE Run Time: 4719

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-9-17 **Time:** 0805 **Temp:** 48°

SVE Process Vacuum: 37 in WC

SVE Process Flow: 0.4 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: [redacted] °F

Sparge Room Temp: [redacted] 60 °F

XP Room Temp: 84 °F

System Status: Running (Arrival)

System Status: Running (Departure)

Air Sample Collected: No

Sparge Run Time: [redacted] 3394

SVE Run Time: [redacted] 4767

Surge Counter: 160

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-8-17 **Time:** 0750 **Temp:** 39

SVE Process Vacuum: 36 in WC

SVE Process Flow: .4 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 62 °F

Sparge Room Temp: 56 °F

XP Room Temp: 85 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

Sparge Run Time: 3370

SVE Run Time: 4743

Surge Counter: 160

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 1-7-17 **Time:** 0850 **Temp:** 46°

SVE Process Vacuum: 36.5 in WC

SVE Process Flow: 0.2 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 65 °F

Sparge Room Temp: 58 °F

XP Room Temp: 83 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 3346

SVE Run Time: 4719

Surge Counter: ~~[illegible]~~ 160

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11/6/17 **Time:** 1230 **Temp:** 65

SVE Process Vacuum: 36.9 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 86 °F

Sparge Room Temp: 79 °F

XP Room Temp: 84 °F

System Status: (Arrival) Off

System Status: (Departure) On

Air Sample Collected: N

Sparge Run Time: 3326

SVE Run Time: 4699

Surge Counter: 360

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-3-17 **Time:** _____ **Temp:** 57°

SVE Process Vacuum: 36.8 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.6 PSI

Sparge Temp: 73 °F

Sparge Room Temp: 79 °F

XP Room Temp: 85 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3249

SVE Run Time: 4622

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-2-17 **Time:** _____ **Temp:** 55°

SVE Process Vacuum: 36.8 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.5 PSI

Sparge Temp: 74 °F

Sparge Room Temp: 71 °F

XP Room Temp: 89 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

Sparge Run Time: 3225

SVE Run Time: 4598

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-1-17 **Time:** _____ **Temp:** 46°

SVE Process Vacuum: 36.7 in WC

SVE Process Flow: 0.3 SCFM

Sparge PSI: 4.4 PSI

Sparge Temp: 64 °F

Sparge Room Temp: 67 °F

XP Room Temp: 84 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

Sparge Run Time: 3201

SVE Run Time: 4574

Surge Counter: 359

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-22-17 **Time:** 0710 **Temp:** 39°

SVE Process Vacuum: 33 in WC

Sparge PSI: 7 PSI

SVE Process Flow: ~~1.5~~ 6 IN H20

Sparge Temp: 48 °F

Control Room Temp: 39 °F

XP Room Temp: 47 °F

System Status: (Arrival) Running

System Status: (Departure) OFF

Air Sample Collected: No

SVE Run Time: 5666

Sparge Run Time: 5640

Maintenance Work Performed, Adjustments Made and Comments:

OFF @ 0800

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-21-17 **Time:** 0730 **Temp:** 31°

SVE Process Vacuum: 33.6 in WC

Sparge PSI: 6.4 PSI

SVE Process Flow: 6 IN H20

Sparge Temp: 40.7 °F

Control Room Temp: 35 °F

XP Room Temp: 44 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

SVE Run Time: 5642

Sparge Run Time: 5616

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-20-17 **Time:** 0645 **Temp:** 49°

SVE Process Vacuum: 34 in WC

Sparge PSI: 7.8 PSI

SVE Process Flow: 6 IN H20

Sparge Temp: 59 °F

Control Room Temp: 42 °F

XP Room Temp: 49 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

SVE Run Time: 5619

Sparge Run Time: 5593

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-19-17 **Time:** 0720 **Temp:** 43°

SVE Process Vacuum: 35 in WC

Sparge PSI: ~~38~~ 7.3 PSI

SVE Process Flow: 6.5 IN H20

Sparge Temp: 60 °F

Control Room Temp: 38 °F

XP Room Temp: 48 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

SVE Run Time: 5594

Sparge Run Time: 5568

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-18-17 **Time:** 0750 **Temp:** 37°

SVE Process Vacuum: 33 in WC

Sparge PSI: 6.9 PSI

SVE Process Flow: 6 IN H20

Sparge Temp: 46.6 °F

Control Room Temp: 36 °F

XP Room Temp: 47 °F

System Status: Running (Arrival)

System Status: Running (Departure)

Air Sample Collected: No

SVE Run Time: 5570

Sparge Run Time: 5544

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-15-17 **Time:** 0725 **Temp:** 27°

SVE Process Vacuum: 0/36.3 in WC

Sparge PSI: 0/9.1 PSI

SVE Process Flow: 0/6 IN H20

Sparge Temp: 32 °F

Control Room Temp: 35 °F

XP Room Temp: 37 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

SVE Run Time: 5499

Sparge Run Time: 5473

Maintenance Work Performed, Adjustments Made and Comments:

Power Loss - ~~Restarted automatically~~

Manual Restart required on VFDs

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-14-17 **Time:** 0750 **Temp:** 38°

SVE Process Vacuum: 35 in WC

Sparge PSI: 7.9 PSI

SVE Process Flow: 6 IN H20

Sparge Temp: 51.9 °F

Control Room Temp: 36 °F

XP Room Temp: 45 °F

System Status: (Arrival) OFF

System Status: (Departure) Running @ 1230

Air Sample Collected: No

SVE Run Time: 5497

Sparge Run Time: 5471

Maintenance Work Performed, Adjustments Made and Comments:

Power Loss @ 1747 on 12/13

Returned 1230

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-13-17 **Time:** 0755 **Temp:** 24°

SVE Process Vacuum: 0 / 35 in WC

Sparge PSI: 0 / 5.2 PSI

SVE Process Flow: 0 / 6 IN H20

Sparge Temp: 32 °F

Control Room Temp: 32 °F

XP Room Temp: 34 °F

System Status: (Arrival) MS tank high level

System Status: (Departure) Running

Air Sample Collected: No

SVE Run Time: 5488

Sparge Run Time: 5461

Maintenance Work Performed, Adjustments Made and Comments:

Drained MS tank

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-12-17 **Time:** 0700 **Temp:** 43°

SVE Process Vacuum: 39 in WC

Sparge PSI: 7.3 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 53 °F

Control Room Temp: 40 °F

XP Room Temp: 49 °F

System Status: Running (Arrival)

System Status: Running (Departure)

Air Sample Collected: No

SVE Run Time: 5479

Sparge Run Time: 5453

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-11-17 **Time:** 0930 **Temp:** 40°

SVE Process Vacuum: 33.2 in WC

Sparge PSI: 8.2 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 59 °F

Control Room Temp: 42 °F

XP Room Temp: 51 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

SVE Run Time: 5461

Sparge Run Time: 5435

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/8/17 **Time:** 1530 **Temp:** 39

SVE Process Vacuum: 32.7 in WC

Sparge PSI: 7.2 PSI

SVE Process Flow: 33.4 IN H20

Sparge Temp: 50.3 °F

Control Room Temp: 38 °F

XP Room Temp: 48 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

SVE Run Time: 5392

Sparge Run Time: 5366

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/7/17 **Time:** 1550 **Temp:** 38°

SVE Process Vacuum: 34.3 in WC

Sparge PSI: 6-8 PSI

SVE Process Flow: 1-2 IN H20

Sparge Temp: 59.2 °F

Control Room Temp: 41 °F

XP Room Temp: 51 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

SVE Run Time: 5368

Sparge Run Time: 5342

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/6/17 **Time:** 1520 **Temp:** 38

SVE Process Vacuum: 33.2 in WC

Sparge PSI: 7.6 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 56.1 °F

Control Room Temp: 40 °F

XP Room Temp: 50 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

SVE Run Time: 5344

Sparge Run Time: 5318

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12/5/17 **Time:** 1505 **Temp:** 57

SVE Process Vacuum: 32.3 in WC

Sparge PSI: 7.1 PSI

SVE Process Flow: 1.0 IN H20

Sparge Temp: 67.7 °F

Control Room Temp: 46 °F

XP Room Temp: 54 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

SVE Run Time: 5319

Sparge Run Time: 5293

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-4-17 **Time:** _____ **Temp:** 33°

SVE Process Vacuum: 27.0 in WC

Sparge PSI: 6.9 PSI

SVE Process Flow: 1.0 IN H20

Sparge Temp: 63.1 °F

Control Room Temp: 47 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 5295

Sparge Run Time: 5269

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 12-1-17 **Time:** _____ **Temp:** 43°

SVE Process Vacuum: 32.6 in WC

Sparge PSI: 6.4 PSI

SVE Process Flow: 1.0 IN H20

Sparge Temp: 62.1 °F

Control Room Temp: 45 °F

XP Room Temp: 50 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 5216

Sparge Run Time: 5190

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-30-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 31.1 in WC

Sparge PSI: 5.9 PSI

SVE Process Flow: 1.0 IN H20

Sparge Temp: 57.9 °F

Control Room Temp: 43 °F

XP Room Temp: 48 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 5192

Sparge Run Time: 5166

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-29-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 37.1 in WC

Sparge PSI: 6.4 PSI

SVE Process Flow: 1.0 IN H20

Sparge Temp: 64.2 °F

Control Room Temp: 45 °F

XP Room Temp: 50 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 5166

Sparge Run Time: 5140

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-28-17 **Time:** _____ **Temp:** 38°

SVE Process Vacuum: 29.1 in WC

Sparge PSI: 9.3 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 79.3 °F

Control Room Temp: 51 °F

XP Room Temp: 51 °F

System Status: OFF (*) (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 5146

Sparge Run Time: 5120

Maintenance Work Performed, Adjustments Made and Comments:

(*) 0643 AM moisture separator high level alarm — drained the m/s tank;

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-27-17 **Time:** _____ **Temp:** 43°

SVE Process Vacuum: 32.7 in WC

Sparge PSI: 7.3 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 53.1 °F

Control Room Temp: 41 °F

XP Room Temp: 49 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 5123

Sparge Run Time: 5097

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-22-17 **Time:** _____ **Temp:** 52°

SVE Process Vacuum: 32.6 in WC

Sparge PSI: 8.1 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 63.2 °F

Control Room Temp: 45 °F

XP Room Temp: 51 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 5003

Sparge Run Time: 4977

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-21-17 **Time:** _____ **Temp:** 42°

SVE Process Vacuum: 32.9 in WC

Sparge PSI: 7.5 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 55.9 °F

Control Room Temp: 41 °F

XP Room Temp: 48 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 4979

Sparge Run Time: 4953

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-20-17 **Time:** _____ **Temp:** 39°

SVE Process Vacuum: 33.6 in WC

Sparge PSI: 7.2 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 51.8 °F

Control Room Temp: 39 °F

XP Room Temp: 46 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: No

SVE Run Time: 4955

Sparge Run Time: 4929

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-17-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 33.0 in WC

Sparge PSI: 7.9 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 63.8 °F

Control Room Temp: 44 °F

XP Room Temp: 48 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 4883

Sparge Run Time: 4857

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-16-17 **Time:** _____ **Temp:** 45°

SVE Process Vacuum: 36.5 in WC

Sparge PSI: 8.6 PSI

SVE Process Flow: 1.5 IN H20

Sparge Temp: 79.2 °F

Control Room Temp: 51 °F

XP Room Temp: 51 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 4858

Sparge Run Time: 4832

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-15-17 **Time:** _____ **Temp:** 36°

SVE Process Vacuum: 32.0 in WC

Sparge PSI: 7.2 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 46.4 °F

Control Room Temp: 38 °F

XP Room Temp: 47 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 4835

Sparge Run Time: 4809.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-14-17 **Time:** _____ **Temp:** 39°

SVE Process Vacuum:	30.8 in WC	**System Status:** (Arrival)	ON
Sparge PSI:	7.5 PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.8 IN H20		
Sparge Temp:	53.3 °F	**Air Sample Collected:**	No
Control Room Temp:	41 °F	**SVE Run Time:**	4815
XP Room Temp:	47 °F	**Sparge Run Time:**	4789

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-13-17 **Time:** _____ **Temp:** 40°

SVE Process Vacuum: 30.9 in WC

Sparge PSI: 7.4 PSI

SVE Process Flow: _____ IN H20

Sparge Temp: 50.1 °F

Control Room Temp: 39 °F

XP Room Temp: 46 °F

System Status: ON (Arrival)

System Status: ON (Departure)

Air Sample Collected: NO

SVE Run Time: 4792

Sparge Run Time: 4766

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-10-17 **Time:** 0730 **Temp:** 45°

SVE Process Vacuum: 32 in WC

Sparge PSI: 8.1 PSI

SVE Process Flow: IN H20

Sparge Temp: 56.7 °F

Control Room Temp: 41 °F

XP Room Temp: 47 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

SVE Run Time: 4719

Sparge Run Time: 4693

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-9-17 **Time:** 0750 **Temp:** 48°

SVE Process Vacuum: 32 in WC

Sparge PSI: 8 PSI

SVE Process Flow: [illegible] IN H20

Sparge Temp: 55 °F

Control Room Temp: 42 °F

XP Room Temp: 47 °F

System Status: (Arrival) Running

System Status: (Departure) Running

Air Sample Collected: No

SVE Run Time: 4698

Sparge Run Time: 4672

Maintenance Work Performed, Adjustments Made and Comments:

off for 2 hours for insulation installation

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-8-17 **Time:** 0755 **Temp:** ~~39~~ 43

SVE Process Vacuum: 0 in WC

Sparge PSI: 0 PSI

SVE Process Flow: 0 IN H20

Sparge Temp: 47 °F

Control Room Temp: 39 °F

XP Room Temp: 40 °F

System Status: (Arrival) OFF

System Status: (Departure) OFF

Air Sample Collected: No

SVE Run Time: 4681

Sparge Run Time: 4655

Maintenance Work Performed, Adjustments Made and Comments:

Turned off while Insulating Pump room

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-7-17 **Time:** 0832 **Temp:** 44°

SVE Process Vacuum:	31.8 in WC	**System Status:** (Arrival)	ON
Sparge PSI:	8.0 PSI	**System Status:** (Departure)	ON
SVE Process Flow:	1.5 IN H20		
Sparge Temp:	51.2 °F	**Air Sample Collected:**	No
Control Room Temp:	41 °F	**SVE Run Time:**	4659
XP Room Temp:	44 °F	**Sparge Run Time:**	4633

Maintenance Work Performed, Adjustments Made and Comments:

Began framing & inside of pump room/SVE blower room for insulation.

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11/6/17 **Time:** 1045 **Temp:** 60

SVE Process Vacuum: 41.4 in WC

Sparge PSI: 9.7 PSI

SVE Process Flow: 1.4 IN H20

Sparge Temp: 77.4 °F

Control Room Temp: 53 °F

XP Room Temp: 56 °F

System Status: (Arrival) On

System Status: (Departure) On

Air Sample Collected: N

SVE Run Time: 4637

Sparge Run Time: 4611

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-3-17 **Time:** _____ **Temp:** 57°

SVE Process Vacuum: 33.3 in WC

Sparge PSI: 8.5 PSI

SVE Process Flow: 1.7 IN H20

Sparge Temp: 66.3 °F

Control Room Temp: 47 °F

XP Room Temp: 49 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: No

SVE Run Time: 4561.

Sparge Run Time: 4535.

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-2-17 **Time:** _____ **Temp:** 55°

SVE Process Vacuum: 30.7 in WC

Sparge PSI: 8.4 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 66.5 °F

Control Room Temp: 47 °F

XP Room Temp: 50 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 4537

Sparge Run Time: 4511

Maintenance Work Performed, Adjustments Made and Comments:

Cell 3 AS/SVE System Data Log

EnviroAnalytics Group

Date: 11-1-17 **Time:** _____ **Temp:** 46°

SVE Process Vacuum: 31.9 in WC

Sparge PSI: 7.7 PSI

SVE Process Flow: 1.6 IN H20

Sparge Temp: 55.2 °F

Control Room Temp: 42 °F

XP Room Temp: 44 °F

System Status: (Arrival) ON

System Status: (Departure) ON

Air Sample Collected: NO

SVE Run Time: 4513

Sparge Run Time: 4487

Maintenance Work Performed, Adjustments Made and Comments:

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12-22-17 **Time:** 0745 **Temp:** 39°

System Status: Running/OFF

Generator Status: Running/OFF

Generator Hours: 3755.9

Vacuum IN Hg: 11

DPT 101: .12

DPT 102: 1.1

Blower Temperature: 175

Blower Outlet PSI: 34

Blower Hours (B-101): 1937

P-101 Hours: 237

Discharge Water Total: 348741

# of Active Wells: 9

Avg Vacuum on Wells: 10 in Hg

Bag Filters Changed: Yes

Generator Fuel Level: 1/2 reserve

Carroll Fuel Tank Level: Empty

Product Drum Level: 25

Product Tank Measurement: 15 3/4"

(Weekly)

P-601 Hours: 8

Product Transfer Pump Cycles: 31

Arrival:	**T1:** 350	**T2:** 386	**T3:** 394	**Catox Hours:** 2645.5
Departure:	**T1:** –	**T2:** –	**T3:** –	

Additional Notes/ Maintenance Performed

OFF @ 0900 For holiday break

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12-21-17 **Time:** 0800 **Temp:** 32°

System Status: Running **Discharge Water Total:** 347159

Generator Status: Running **# of Active Wells:** 10

Generator Hours: 3731 **Avg Vacuum on Wells:** 10 in Hg

Vacuum IN Hg: 12 **Bag Filters Changed:** No

DPT 101: .10 **Generator Fuel Level:** Reserve Full

DPT 102: 1.0 **Carroll Fuel Tank Level:** Low

Blower Temperature: 180 **Product Drum Level:** 25

Blower Outlet PSI: 30 **Product Tank Measurement:** 15 3/4" =
(Weekly)

Blower Hours (B-101): 1913 **P-601 Hours:** 8

P-101 Hours: 232 **Product Transfer Pump Cycles:** 31

Arrival: **T1:** 350 **T2:** 360 **T3:** 372

Departure: **T1:** 350 **T2:** 404 **T3:** 410 **Catox Hours:** 2620.7

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12-20-17 **Time:** 0715 **Temp:** 50°

System Status: Running **Discharge Water Total:** 346,147

Generator Status: Running **# of Active Wells:** 10

Generator Hours: 3707.7 **Avg Vacuum on Wells:** 10 in Hg

Vacuum IN Hg: 12 **Bag Filters Changed:** No

DPT 101: .10 **Generator Fuel Level:** 3/4 reserve

DPT 102: 1.1 **Carroll Fuel Tank Level:** 1/2

Blower Temperature: 175 **Product Drum Level:** 25

Blower Outlet PSI: 34 **Product Tank Measurement:** –

(Weekly)

Blower Hours (B-101): 1888 **P-601 Hours:** 8

P-101 Hours: 231 **Product Transfer Pump Cycles:** 31

Arrival:	**T1:** 350	**T2:** 392	**T3:** 390	**Catox Hours:** 2596.8
Departure:	**T1:** 350	**T2:** 393	**T3:** 400	

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12.19.17 **Time:** 0745 **Temp:** 44°

System Status: Not Running **Discharge Water Total:** 345,832

Generator Status: Running **# of Active Wells:** 0

Generator Hours: _____ **Avg Vacuum on Wells:** 0 in Hg

Vacuum IN Hg: 0 **Bag Filters Changed:** No

DPT 101: 0 **Generator Fuel Level:** Full

DPT 102: 0 **Carroll Fuel Tank Level:** 1/3

Blower Temperature: 40 **Product Drum Level:** 19

Blower Outlet PSI: 0 **Product Tank Measurement:** _____
(Weekly)

Blower Hours (B-101): 1876 **P-601 Hours:** 8

P-101 Hours: 230 **Product Transfer Pump Cycles:** 31

Arrival: **T1:** _____ **T2:** _____ **T3:** _____

Catox Hours: _____

Departure: **T1:** _____ **T2:** _____ **T3:** _____

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12-18-17 **Time:** 0815 **Temp:** 38°

System Status: Not Running **Discharge Water Total:** 344846

Generator Status: Running **# of Active Wells:** 0

Generator Hours: _____ **Avg Vacuum on Wells:** 0 in Hg

Vacuum IN Hg: 0 **Bag Filters Changed:** No

DPT 101: 0 **Generator Fuel Level:** Filled

DPT 102: 0 **Carroll Fuel Tank Level:** 1/2

Blower Temperature: 0 **Product Drum Level:** 19

Blower Outlet PSI: 0 **Product Tank Measurement:** _____
(Weekly)

Blower Hours (B-101): 1870 **P-601 Hours:** 8

P-101 Hours: ~~10~~ 230 **Product Transfer Pump Cycles:** 31

Arrival: **T1:** _____ **T2:** _____ **T3:** _____

Catox Hours: _____

Departure: **T1:** _____ **T2:** _____ **T3:** _____

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12-15-17 **Time:** 0740 **Temp:** 28°

System Status: Not Running **Discharge Water Total:** 344846

Generator Status: Running **# of Active Wells:** 0

Generator Hours: _____ **Avg Vacuum on Wells:** 0 in Hg

Vacuum IN Hg: 0 **Bag Filters Changed:** No

DPT 101: 0 **Generator Fuel Level:** Full

DPT 102: 0 **Carroll Fuel Tank Level:** 3/4

Blower Temperature: NA **Product Drum Level:** 19

Blower Outlet PSI: 0 **Product Tank Measurement:** (Weekly) D

Blower Hours (B-101): 1870 **P-601 Hours:** 8

P-101 Hours: 230 **Product Transfer Pump Cycles:** 31

Arrival: **T1:** — **T2:** — **T3:** —

Departure: **T1:** — **T2:** — **T3:** —

Catox Hours: _____

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12-14-17 **Time:** 0715 **Temp:** 37°

System Status: NOT Running **Discharge Water Total:** 344846

Generator Status: ON **# of Active Wells:** –

Generator Hours: 3565.5 **Avg Vacuum on Wells:** – in Hg

Vacuum IN Hg: 0 **Bag Filters Changed:** No

DPT 101: 0 **Generator Fuel Level:** 3/4 reserve

DPT 102: 0 **Carroll Fuel Tank Level:** Full

Blower Temperature: 0 **Product Drum Level:** 20

Blower Outlet PSI: 0 **Product Tank Measurement:** ~~28~~

(Weekly)

Blower Hours (B-101): 1870 **P-601 Hours:** ~~31~~ 8

P-101 Hours: 230 **Product Transfer Pump Cycles:** 31

Arrival: **T1:** 58 **T2:** 55 **T3:** 63

Departure: **T1:** 58 **T2:** 55 **T3:** 63

Catox Hours: 2453

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12-13-17 **Time:** 0830 **Temp:** 24°

System Status: Stopped **Discharge Water Total:** 344,846

Generator Status: Running **# of Active Wells:** 0

Generator Hours: 3541 **Avg Vacuum on Wells:** 0 in Hg

Vacuum IN Hg: 0 **Bag Filters Changed:** No

DPT 101: 0 **Generator Fuel Level:** 1/2 main

DPT 102: 0. **Carroll Fuel Tank Level:** Full

Blower Temperature: 36 **Product Drum Level:** 20

Blower Outlet PSI: 0 **Product Tank Measurement:** NA (Weekly)

Blower Hours (B-101): 1870 **P-601 Hours:** 8

P-101 Hours: 230 **Product Transfer Pump Cycles:** 31

Arrival: **T1:** 245 **T2:** 220 **T3:** 226

Departure: **T1:** 245 **T2:** 220 **T3:** 226 **Catox Hours:** 2433.1

Additional Notes/ Maintenance Performed

Acts Shut off due to high pressure in FX-501 bag filter housing – Effluent pipes frozen

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12-12-17 Time: 0730 Temp: 45°

System Status: OFF/ON @ 0730 Discharge Water Total: 343,882

Generator Status: OFF/ON @ 0715 # of Active Wells: 10

Generator Hours: 3519.1 Avg Vacuum on Wells: 10 in Hg

Vacuum IN Hg: 12 Bag Filters Changed: No

DPT 101: .10 Generator Fuel Level: 1/2 reserve

DPT 102: 1.0 Carroll Fuel Tank Level: 0

Blower Temperature: 150 Product Drum Level: 19

Blower Outlet PSI: 35 Product Tank Measurement: -
(Weekly)

Blower Hours (B-101): 1853 P-601 Hours: 8

P-101 Hours: 229 Product Transfer Pump Cycles: 31

Arrival:	T1: 101	T2: 89	T3: 98	Catox Hours:
Departure:	T1: 413	T2: 406	T3: 350	

Additional Notes/ Maintenance Performed

System

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12-11-17 Time: 0835 Temp: 36°

System Status: OFF

Generator Status: ON

Generator Hours: 3513.3

Vacuum IN Hg: 0/12

DPT 101: ~ .1

DPT 102: ~ 1.0

Blower Temperature: 120

Blower Outlet PSI: 34

Blower Hours (B-101): _____

P-101 Hours: _____

Discharge Water Total: _____

# of Active Wells: _____

Avg Vacuum on Wells: _____ in Hg

Bag Filters Changed: No

Generator Fuel Level: 1/2 tank reserve

Carroll Fuel Tank Level: Empty

Product Drum Level: 28

Product Tank Measurement: – (Weekly)

P-601 Hours: _____

Product Transfer Pump Cycles: _____

Arrival: T1: Low T2: Low T3: Low

Departure: T1: _____ T2: _____ T3: _____

Catox Hours: _____

Additional Notes/ Maintenance Performed

System Restarted @ 0845. Shut off 12-10-17 due to high pressure in bag filter ~~housin~~ transfer pump

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12/8/17 Time: 1515 Temp: 39

System Status: On Discharge Water Total: 339 209

Generator Status: On # of Active Wells: 10

Generator Hours: 3447 Avg Vacuum on Wells: 10 in Hg

Vacuum IN Hg: 11.7 Bag Filters Changed: Y

DPT 101: 0 Generator Fuel Level: Full

DPT 102: 1 Carroll Fuel Tank Level: 1/4

Blower Temperature: 175 Product Drum Level: 27 Gallons

Blower Outlet PSI: 30 Product Tank Measurement: 266

(Weekly)

Blower Hours (B-101): 1796 P-601 Hours: 8

P-101 Hours: 224 Product Transfer Pump Cycles: 30

Arrival: T1: 50 T2: 47 T3: LO-TEMP

Departure: T1: 350 T2: 399 T3: 404 Catox Hours:

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12/7/16 Time: 0900 Temp: 38

System Status: On

Generator Status: On

Generator Hours: 3419

Vacuum IN Hg: 11.5

DPT 101: 0.10

DPT 102: 1.0

Blower Temperature: 175

Blower Outlet PSI: 33

Blower Hours (B-101): 1788

P-101 Hours: 223

Discharge Water Total: 338579

# of Active Wells: 10

Avg Vacuum on Wells: 10.5 in Hg

Bag Filters Changed: N

Generator Fuel Level: Full

Carroll Fuel Tank Level: 1/2

Product Drum Level: 246

Product Tank Measurement: (Weekly)

P-601 Hours: 8

Product Transfer Pump Cycles: 30

Arrival:	T1: 10	T2: 112	T3: 118	Catox Hours: 2341
Departure:	T1: 350	T2: 447	T3: 447	

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12/6/17 **Time:** 1515 **Temp:** 39

System Status: On **Discharge Water Total:** 338,579

Generator Status: On **# of Active Wells:** 10

Generator Hours: _____ **Avg Vacuum on Wells:** _____ in Hg

Vacuum IN Hg: _____ **Bag Filters Changed:** N

DPT 101: _____ **Generator Fuel Level:** 3/4 Reserve

DPT 102: _____ **Carroll Fuel Tank Level:** 3/4

Blower Temperature: _____ **Product Drum Level:** ~24 Gallons

Blower Outlet PSI: _____ **Product Tank Measurement:** _____
(Weekly)

Blower Hours (B-101): 1787 **P-601 Hours:** 8

P-101 Hours: 223 **Product Transfer Pump Cycles:** 30

Arrival: **T1:** _____ **T2:** _____ **T3:** _____

Catox Hours: _____

Departure: **T1:** _____ **T2:** _____ **T3:** _____

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12/5/17 Time: 1240 Temp: 55

System Status: On Discharge Water Total: 337928

Generator Status: On # of Active Wells: 10

Generator Hours: 3374 Avg Vacuum on Wells: 11 in Hg

Vacuum IN Hg: 11 Bag Filters Changed: N

DPT 101: 0 Generator Fuel Level: 1/2 Main

DPT 102: 1 Carroll Fuel Tank Level: 3/4

Blower Temperature: 200 Product Drum Level: 23 Gallons

Blower Outlet PSI: 30 Product Tank Measurement: (Weekly)

Blower Hours (B-101): 1781 P-601 Hours: 8

P-101 Hours: 222 Product Transfer Pump Cycles: 30

Arrival: T1: 350 T2: 413 T3: 416

Departure: T1: 350 T2: 408 T3: 412

Catox Hours: 2329.4

Additional Notes/ Maintenance Performed

- AOS. M/S Pump Overload + Cat-Ox Fault Alarm Active.
- Reset VCV + adjusted M/S Pump. System restarted.
- @1240 Filter high pressure alarm @ FX-501 Active. Relieved pressure on valve, system restarted.
- Adjusted Stingers

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12/4/17 **Time:** 1110 **Temp:** 58

System Status: On **Discharge Water Total:** 337245

Generator Status: On **# of Active Wells:** 10

Generator Hours: 3349 **Avg Vacuum on Wells:** 11 in Hg

Vacuum IN Hg: 11 **Bag Filters Changed:** N

DPT 101: 0.05 **Generator Fuel Level:** Full

DPT 102: 1.0 **Carroll Fuel Tank Level:** 3/4

Blower Temperature: 180 **Product Drum Level:** 22 Gallons

Blower Outlet PSI: 32 **Product Tank Measurement:** (Weekly)

Blower Hours (B-101): 1776 **P-601 Hours:** 8

P-101 Hours: 221 **Product Transfer Pump Cycles:** 30

Arrival:	**T1:** 26	**T2:** 24	**T3:** 25	**Catox Hours:** 2321.5
Departure:	**T1:** 350	**T2:** 425	**T3:** 422	

Additional Notes/ Maintenance Performed

- AOS, Cat Ox Fault Alarm + Filter High Pressure Alarms activated.
- Reset VCV Power, checked Filters, filters were fine. System restarted @1130.
- Added fuel to Generator.
- Water on floor. Source unknown.
- Light Bulb by door went out.

port	well	port	well
1	168	15	92
4	128	17	150
5	153	40	143
13	149	41	140
14	152	43	89

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 12-1-17 **Time:** 0700 **Temp:** 43

System Status: Running

Generator Status: Running

Generator Hours: 3274.3

Vacuum IN Hg: 12

DPT 101: .1

DPT 102: 1.0

Blower Temperature: 185

Blower Outlet PSI: 30

Blower Hours (B-101): 1766

P-101 Hours: 220

Discharge Water Total: 335,766

# of Active Wells: 9

Avg Vacuum on Wells: 10.5 in Hg

Bag Filters Changed: Yes

Generator Fuel Level: 1/2 tank

Carroll Fuel Tank Level: Empty

Product Drum Level: 24 gal

Product Tank Measurement: (Weekly)

P-601 Hours: 7

Product Transfer Pump Cycles: 25

Arrival:	**T1:** 350	**T2:** 386	**T3:** 394	**Catox Hours:** 2308.2
Departure:	**T1:** 350	**T2:** 405	**T3:** 410	

Additional Notes/ Maintenance Performed

Rotated Active Wells

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-30-17 Time: 0815 Temp: 42

System Status: Running

Generator Status: Running

Generator Hours: 3251.6

Vacuum IN Hg: 12.5

DPT 101: .10

DPT 102: 1.0

Blower Temperature: 180

Blower Outlet PSI: 30

Blower Hours (B-101): 1743

P-101 Hours: 214

Discharge Water Total: 330485

# of Active Wells: 9

Avg Vacuum on Wells: 11 in Hg

Bag Filters Changed:

Generator Fuel Level: 1/4 main

Carroll Fuel Tank Level: 1/4

Product Drum Level: 15

Product Tank Measurement: (Weekly)

P-601 Hours: 7

Product Transfer Pump Cycles: 25

Arrival: T1: 350 T2: 390 T3: 396

Catox Hours: 2285.1

Departure: T1: T2: T3:

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-29-17 Time: 0745 Temp: 43°

System Status: OFF/Running

Discharge Water Total: 324529

Generator Status: Running

# of Active Wells: 9

Generator Hours: 3228.7

Avg Vacuum on Wells: 10 in Hg

Vacuum IN Hg: 12

Bag Filters Changed: No

DPT 101: .1

Generator Fuel Level: Filled

DPT 102: 1.0

Carroll Fuel Tank Level: 1/4

Blower Temperature: 185

Product Drum Level: 20

Blower Outlet PSI: 32

Product Tank Measurement: -
(Weekly)

Blower Hours (B-101): 1720

P-601 Hours: 7

P-101 Hours: 208

Product Transfer Pump Cycles: 24

Arrival:	T1: 202	T2: 211	T3: 170	Catox Hours: 2262.0
Departure:	T1: 435	T2: 438	T3: 349	

Additional Notes/ Maintenance Performed

Back on @ 0830

cleared MS pump overload

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-28-17 **Time:** 0715 **Temp:** 38°

System Status: Running **Discharge Water Total:** 320,756

Generator Status: Running **# of Active Wells:** 10

Generator Hours: 3203.4 **Avg Vacuum on Wells:** 10 in Hg

Vacuum IN Hg: 12 **Bag Filters Changed:** No

DPT 101: .10 **Generator Fuel Level:** Full

DPT 102: 1.05 **Carroll Fuel Tank Level:** 3/4

Blower Temperature: 180° **Product Drum Level:** 15

Blower Outlet PSI: 33 **Product Tank Measurement:** -
(Weekly)

Blower Hours (B-101): 1706 **P-601 Hours:** 7

P-101 Hours: 204 **Product Transfer Pump Cycles:** 24

Arrival: **T1:** 350 **T2:** 394 **T3:** 400 **Catox Hours:** 2245.3

Departure: **T1:** - **T2:** - **T3:** -

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-22-17 **Time:** 0700 **Temp:** 52°

System Status: Running

Generator Status: Running

Generator Hours: 3175.5

Vacuum IN Hg: 12.5

DPT 101: .05

DPT 102: .90

Blower Temperature: 190

Blower Outlet PSI: 32

Blower Hours (B-101): 1678

P-101 Hours: 199

Discharge Water Total: 174966

# of Active Wells: 10

Avg Vacuum on Wells: 10.5 in Hg

Bag Filters Changed: No

Generator Fuel Level: 1/2 main

Carroll Fuel Tank Level: Full

Product Drum Level: 20

Product Tank Measurement: –
(Weekly)

P-601 Hours: 7

Product Transfer Pump Cycles: 23

Arrival:	**T1:** 350	**T2:** 390	**T3:** 394	**Catox Hours:** 2217.3
Departure:	**T1:** 350	**T2:** 404	**T3:** 410	

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-21-17 **Time:** 0700 **Temp:** 42

System Status: Running **Discharge Water Total:** 308,920

Generator Status: Running **# of Active Wells:** 10

Generator Hours: 3150.8 **Avg Vacuum on Wells:** 11.5 in Hg

Vacuum IN Hg: 13.3 **Bag Filters Changed:** No

DPT 101: 0.05 **Generator Fuel Level:** Filled

DPT 102: .90 **Carroll Fuel Tank Level:** Full

Blower Temperature: 200 **Product Drum Level:** 33

Blower Outlet PSI: 29 **Product Tank Measurement:** NA (Weekly)

Blower Hours (B-101): 1653 **P-601 Hours:** 7

P-101 Hours: 193 **Product Transfer Pump Cycles:** 22

Arrival: **T1:** 350 **T2:** 390 **T3:** 399 **Catox Hours:** 2192.3

Departure: **T1:** _____ **T2:** _____ **T3:** _____

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-20-17 **Time:** 0930 **Temp:** 40°

System Status: Running **Discharge Water Total:** 304036

Generator Status: Running **# of Active Wells:** 10

Generator Hours: 3130.2 **Avg Vacuum on Wells:** 10 in Hg

Vacuum IN Hg: 11.3 **Bag Filters Changed:** No

DPT 101: .10 **Generator Fuel Level:** Full

DPT 102: 1.15 **Carroll Fuel Tank Level:** Filled AM

Blower Temperature: 170 **Product Drum Level:** 20

Blower Outlet PSI: 35 **Product Tank Measurement:** 7¾" = 190
(Weekly)

Blower Hours (B-101): 1634 **P-601 Hours:** 7

P-101 Hours: 189 **Product Transfer Pump Cycles:** 22

Arrival:	**T1:** 350	**T2:** 384	**T3:** 393	**Catox Hours:** 2171.5
Departure:	**T1:** 350	**T2:** 391	**T3:** 400	

Additional Notes/ Maintenance Performed

Following well switches were made:

138 / 133
143 / 134
98 / 139
140 / 144
150 / 147
151 / 148
152 / 149

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-17-17 **Time:** 0730 **Temp:** 39°

System Status: Running **Discharge Water Total:** 297,670

Generator Status: Running **# of Active Wells:** 10

Generator Hours: 3056.3 **Avg Vacuum on Wells:** 10 in Hg

Vacuum IN Hg: 12 **Bag Filters Changed:** Yes

DPT 101: .09 **Generator Fuel Level:** 1/4 main

DPT 102: 1.1 **Carroll Fuel Tank Level:** 1/4

Blower Temperature: 170 **Product Drum Level:** 24

Blower Outlet PSI: 34 **Product Tank Measurement:** –
(Weekly)

Blower Hours (B-101): 1558 **P-601 Hours:** 7

P-101 Hours: 183 **Product Transfer Pump Cycles:** 20

Arrival:	**T1:** 350	**T2:** 394	**T3:** 402	**Catox Hours:** 2096.8
Departure:	**T1:** 350	**T2:** 399	**T3:** 406	

Additional Notes/ Maintenance Performed

Cleaned line 151 - #17 Solenoid valve

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-16-17 **Time:** 0930 **Temp:** 52°

System Status: Running **Discharge Water Total:** 295,639

Generator Status: Running **# of Active Wells:** 10

Generator Hours: 3034.3 **Avg Vacuum on Wells:** 10 in Hg

Vacuum IN Hg: 12 **Bag Filters Changed:** Yes

DPT 101: 0.1 **Generator Fuel Level:** Full

DPT 102: 1.0 **Carroll Fuel Tank Level:** 1/3

Blower Temperature: 180 **Product Drum Level:** 28 gal

Blower Outlet PSI: 31 **Product Tank Measurement:** -

Blower Hours (B-101): 1537 (Weekly) **Product Transfer Pump Cycles:** 19

P-101 Hours: 181

Arrival: **T1:** _____ **T2:** _____ **T3:** _____

Catox Hours: _____

Departure: **T1:** _____ **T2:** _____ **T3:** _____

Additional Notes/ Maintenance Performed

N/S pump had tripped overload alarm. Reset overload sensor breaker. N/S pump was indicating pumping 80 psi at pressure gauge. Open and closed gate valve and pressure returned to normal. 30 psi

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-15-17 **Time:** 0630 **Temp:** 36°

System Status: Running

Generator Status: Running

Generator Hours: 3009.4

Vacuum IN Hg: 11.5

DPT 101: .15

DPT 102: 1.10

Blower Temperature: 175

Blower Outlet PSI: 32

Blower Hours (B-101): 1515

P-101 Hours: 179

Discharge Water Total: 293238

# of Active Wells: 8

Avg Vacuum on Wells: 10.5 in Hg

Bag Filters Changed: NO

Generator Fuel Level: Full

Carroll Fuel Tank Level: 3/4 Full

Product Drum Level: 20

Product Tank Measurement: .3 ft - 70 gallons
(Weekly)

Product Transfer Pump Cycles: 18

Arrival:	**T1:** 350	**T2:** 400	**T3:** 405
Departure:	**T1:** 349	**T2:** 407	**T3:** 420

Catox Hours: 2051.9

Additional Notes/ Maintenance Performed

Replaced rubber caps on main lines 4" PVC

Light bulb out right above front entrance xp room

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-14-17 **Time:** 0731 **Temp:** 39°

System Status: Running **Discharge Water Total:** 291,591

Generator Status: Running **# of Active Wells:** 8

Generator Hours: 2985.1 **Avg Vacuum on Wells:** 9.5 in Hg

Vacuum IN Hg: 11 **Bag Filters Changed:** No

DPT 101: 0.1 **Generator Fuel Level:** 3/4 main Full reserve

DPT 102: 1.1 **Carroll Fuel Tank Level:** Full

Blower Temperature: 170 **Product Drum Level:** 25 gal

Blower Outlet PSI: 38 **Product Tank Measurement:** (Weekly)

Blower Hours (B-101): 1492 **Product Transfer Pump Cycles:** 18

P-101 Hours: 177

Arrival: **T1:** 350 **T2:** 389 **T3:** 405

Departure: **T1:** 351 **T2:** 405 **T3:** 412 **Catox Hours:** 2227.4

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-13-17 Time: 0815 Temp: 39

System Status: Running

Generator Status: Running

Generator Hours: 2961.2

Vacuum IN Hg: 12

DPT 101: .10

DPT 102: 1.1

Blower Temperature: 170

Blower Outlet PSI: 34

Blower Hours (B-101): 1468

P-101 Hours: 176

Discharge Water Total: 290,262

# of Active Wells: 5

Avg Vacuum on Wells: 10 in Hg

Bag Filters Changed: No

Generator Fuel Level: Full

Carroll Fuel Tank Level: Full

Product Drum Level: 20 gal

Product Tank Measurement: (Weekly)

Product Transfer Pump Cycles: 17

Arrival:	T1: 350	T2: 388	T3: 390	Catox Hours: 2,003.3
Departure:	T1: 350	T2: 407	T3: 415	

Additional Notes/ Maintenance Performed

6 wells online

product pump cycled 3 times over weekend

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-10-17 **Time:** 0720 **Temp:** 45°

System Status: Running **Discharge Water Total:** 285865

Generator Status: on **# of Active Wells:** 5

Generator Hours: 0 **Bag Filters Changed:** Yes

Vacuum IN Hg: 12 **Generator Fuel Level:** Full

DPT 101: .05 **Carroll Fuel Tank Level:** 1/4

DPT 102: .90 **Product Drum Level:** 0

Blower Temperature: 180 **Product Tank Measurement:** 0

Blower Outlet PSI: 30 (Weekly) **Product Transfer Pump Cycles:** 14

Blower Hours (B-101): 1395 **P-101 Hours:** 171

Arrival:	**T1:** 350	**T2:** 410	**T3:** 415
Departure:	**T1:** 350	**T2:** 419	**T3:** 423

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-9-17 **Time:** 0815 **Temp:** 49°

System Status: Running **Discharge Water Total:** 284,919

Generator Status: Running **# of Active Wells:** 5

Generator Hours: 2866.1 **Bag Filters Changed:** No

Vacuum IN Hg: 11.8 **Generator Fuel Level:** 1/2

DPT 101: 0 **Carroll Fuel Tank Level:** 1/2

DPT 102: 1.1 **Product Drum Level:** 0

Blower Temperature: 180 **Product Tank Measurement:** 0

Blower Outlet PSI: 28 (Weekly) **Product Transfer Pump Cycles:** 14

Blower Hours (B-101): 1372 **P-101 Hours:** 170

N/A

Arrival:	**T1:** 350	**T2:** 355	**T3:** 369
Departure:	**T1:** 350	**T2:** 355	**T3:** 370

Additional Notes/ Maintenance Performed

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-8-17 Time: 0810 Temp: 43°

System Status: OFF

Generator Status: OFF

Generator Hours: _____

Vacuum IN Hg: _____

DPT 101: _____

DPT 102: _____

Blower Temperature: _____

Blower Outlet PSI: _____

Blower Hours (B-101): _____

Discharge Water Total: _____

# of Active Wells: _____

Bag Filters Changed: _____

Generator Fuel Level: _____

Carroll Fuel Tank Level: _____

Product Drum Level: _____

Product Tank Measurement: _____
(Weekly)

Product Transfer Pump Cycles: _____

P-101 Hours: _____

Arrival: T1: _____ T2: _____ T3: _____

Departure: T1: _____ T2: _____ T3: _____

Additional Notes/ Maintenance Performed

Blowing out well run lines with compressor

- Turned system back online 1430
- Ran overnight

CELL 6 Data MPE System Data Log

EnviroAnalytics Group

Date: 11-7-17 **Time:** 0730 **Temp:** _____

System Status: _____ **Discharge Water Total:** _____

Generator Status: _____ **# of Active Wells:** _____

Generator Hours: _____ **Bag Filters Changed:** _____

Vacuum IN Hg: _____ **Generator Fuel Level:** _____

DPT 101: _____ **Carroll Fuel Tank Level:** _____

DPT 102: _____ **Product Drum Level:** _____

Blower Temperature: _____ **Product Tank Measurement:** _____ (Weekly)

Blower Outlet PSI: _____ **Product Transfer Pump Cycles:** _____

Blower Hours (B-101): _____ **P-101 Hours:** _____

Arrival: **T1:** _____ **T2:** _____ **T3:** _____

Departure: **T1:** _____ **T2:** _____ **T3:** _____

Additional Notes/ Maintenance Performed

- System Down
- Clearing hose lines with Compressor

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-22-17 **Time:** 0655 **Temp:** 38°

Total Discharge: 1490719 gal

Daily Discharge _____ gal

AST Pressure: 59 in WC

Oxidizer Main Temp: 571 °F

Oxidizer High Temp: 536 °F

Element Temp: 711 °F

Inf water PH – pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: .85 (0.50-1.0)

System Status: (Arrival) Running

System Status: (Departure) off

Sample Collected: ~~Yes~~ No

Bag Filters Replaced: Yes

Defoamer level: Full

Room Temp: 53.8 °F

Surge Counter: 295

Run Times (hours)

Inlet pump 69 AST Pump 647 MS Pump 1

AST Blower 2560 Outlet Pump 825 GW Pumps 0

Maintenance Work Performed, Adjustments Made and Comments:

off @ 0830

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-21-17 **Time:** 0720 **Temp:** 30°

Total Discharge: ~~146~~ 1,479,619 gal

Daily Discharge 11,931 gal

AST Pressure: 59 in WC

Oxidizer Main Temp: 575 °F

Oxidizer High Temp: 535 °F

Element Temp: 715 °F

Inf water PH 7.5 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 0.8 (0.50-1.0)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: Yes

Bag Filters Replaced: No

Defoamer level: ~~1~~ 1/2

Room Temp: 51 °F

Surge Counter: 295

Run Times (hours)

Inlet pump 685 AST Pump 641 MS Pump 1

AST Blower 2537 Outlet Pump 818 GW Pumps 0 NA

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-20-17 **Time:** 0635 **Temp:** 49°

Total Discharge: 1467688 gal

Daily Discharge 11,288 gal

AST Pressure: 58 in WC

Oxidizer Main Temp: 573 °F

Oxidizer High Temp: 526 °F

Element Temp: 712 °F

Inf water PH – pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: ~~B~~

Bag Filters Replaced: No

Defoamer level: Full

Room Temp: 58 °F

Surge Counter: 295

Run Times (hours)

Inlet pump 679 AST Pump 635 MS Pump 1

AST Blower 2512 Outlet Pump 810 GW Pumps –

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-19-17 **Time:** 0705 **Temp:** 43°

Total Discharge: 1456400 gal

Daily Discharge 11,388 gal

AST Pressure: 60 in WC

Oxidizer Main Temp: 572.5 °F

Oxidizer High Temp: 529.7 °F

Element Temp: 715 °F

Inf water PH _____ pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: Yes

Bag Filters Replaced: No

Defoamer level: Filled

Room Temp: 56.2 °F

Surge Counter: 295

Run Times (hours)

Inlet pump 673 AST Pump 630 MS Pump 1

AST Blower 2488 Outlet Pump 803 GW Pumps 0

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-18-17 **Time:** 0740 **Temp:** 37°

Total Discharge: 1445012 gal

Daily Discharge 11,193 (x3) gal

AST Pressure: 59 in WC

Oxidizer Main Temp: 581 °F

Oxidizer High Temp: 535 °F

Element Temp: 718 °F

Inf water PH 7 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 1.0 (0.50-1.0)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: Yes

Bag Filters Replaced: No

Defoamer level: 1/2

Room Temp: 54 °F

Surge Counter: 295

Run Times (hours)

Inlet pump 668 AST Pump 626 MS Pump 1

AST Blower 2465 Outlet Pump 796 GW Pumps ~~0~~ NA

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-15-17 **Time:** 0710 **Temp:** 27°

Total Discharge: 1411432 gal

Daily Discharge 0 gal

AST Pressure: 0 in WC

Oxidizer Main Temp: 38 °F

Oxidizer High Temp: 35 °F

Element Temp: 38 °F

Inf water PH – pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 0 (0.50-1.0)

System Status: OFF (Arrival)

System Status: OFF (Departure)

Sample Collected: No

Bag Filters Replaced: Yes

Defoamer level: 3/4

Room Temp: 50 °F

Surge Counter: 295

Run Times (hours)

Inlet pump 651 AST Pump 611 MS Pump 1

AST Blower 2395 Outlet Pump 776 GW Pumps 0

Maintenance Work Performed, Adjustments Made and Comments:

Oxidizer would not start

purge blower tripped – Reset

System back in operation approx 0900

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-14-17 **Time:** 0725 **Temp:** 37°

Total Discharge: 1411432 gal

Daily Discharge 4,954 gal

AST Pressure: 6 in WC

Oxidizer Main Temp: 76 °F

Oxidizer High Temp: 71 °F

Element Temp: 82 °F

Inf water PH 7.8 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 0 (0.50-1.0)

System Status: (Arrival) OFF

System Status: (Departure) OFF

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: 1/2

Room Temp: 46 °F

Surge Counter: 290

Run Times (hours)

Inlet pump 651 AST Pump 611 MS Pump 1

AST Blower 2395 Outlet Pump 766 GW Pumps 0

Maintenance Work Performed, Adjustments Made and Comments:

Power Loss @ 1747 on 12/13

Oxidizer would not restart

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-13-17 **Time:** 0740 **Temp:** 23°

Total Discharge: 1406478 gal

Daily Discharge 12,075 gal

AST Pressure: 61.1 in WC

Oxidizer Main Temp: 617.4 °F

Oxidizer High Temp: 572.5 °F

Element Temp: 716 °F

Inf water PH 7.8 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 6 PSI

Mag Gauge Flow: 2 (0.50-1.0)

System Status: Running (Arrival)

System Status: Running (Departure)

Sample Collected: Yes

Bag Filters Replaced: No

Defoamer level: 3/4

Room Temp: 48.5 °F

Surge Counter: 288

Run Times (hours)

Inlet pump 649 AST Pump 609 MS Pump 1

AST Blower 2385 Outlet Pump 723 GW Pumps NA

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-12-17 **Time:** 0650 **Temp:** 43°

Total Discharge: 1,394,403 gal

Daily Discharge 9,979 gal

AST Pressure: 59 in WC

Oxidizer Main Temp: 629.6 °F

Oxidizer High Temp: 591.8 °F

Element Temp: 774 °F

Inf water PH 7.9 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 1.40 (0.50-1.0)

System Status: Running (Arrival)

System Status: Running (Departure)

Sample Collected: Yes

Bag Filters Replaced: No

Defoamer level: Full

Room Temp: 56.2 °F

Surge Counter: 288

Run Times (hours)

Inlet pump 643 AST Pump 604 MS Pump 1

AST Blower 2360 Outlet Pump 765 GW Pumps NA

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-11-17 **Time:** 0915 **Temp:** 38°

Total Discharge: 1384424 gal

Daily Discharge 10,945 ~~32,837~~ #3 gal

AST Pressure: 60 in WC

Oxidizer Main Temp: 644.1 °F

Oxidizer High Temp: 601.2 °F

Element Temp: 773 °F

Inf water PH 7.4 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: ? - pegged Full Right (0.50-1.0)

System Status: Running (Arrival)

System Status: Running (Departure)

Sample Collected: No

Bag Filters Replaced: No

Defoamer level: topped off

Room Temp: 60 °F

Surge Counter: 288

Run Times (hours)

Inlet pump 638 AST Pump 599 MS Pump 1

AST Blower 2340 Outlet Pump 759 GW Pumps

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12/8/17 **Time:** 1530 **Temp:** 39

Total Discharge: 1351587 gal

Daily Discharge _____ gal

AST Pressure: 60.1 in WC

Oxidizer Main Temp: 650.9 °F

Oxidizer High Temp: 607.2 °F

Element Temp: 788 °F

Inf water PH 8.10 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 0.85 (0.50-1.0)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: Y

Defoamer level: 8 Gallons

Room Temp: 55 °F

Surge Counter: 288

Run Times (hours)

Inlet pump 621 AST Pump 587 MS Pump 1

AST Blower 2273 Outlet Pump 739 GW Pumps \

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12/7/16 **Time:** 1030 **Temp:** 39

Total Discharge: 1339741 gal

Daily Discharge _____ gal

AST Pressure: 57.3 in WC

Oxidizer Main Temp: 643 °F

Oxidizer High Temp: 605 °F

Element Temp: 765 °F

Inf water PH 7.82 pH (7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Mag Gauge Flow: 0.90 (0.50-1.0)

System Status: (Arrival) On

System Status: (Departure) On

Sample Collected: N

Bag Filters Replaced: N

Defoamer level: 7 Gallons

Room Temp: 55 °F

Surge Counter: 288

Run Times (hours)

Inlet pump 615 AST Pump 580 MS Pump 1

AST Blower 2249 Outlet Pump 732 GW Pumps \

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12/6/17 **Time:** 1135 **Temp:** 40

Total Discharge: 1327430 gal

Daily Discharge ~~12~~ 12,323 gal

AST Pressure: 58.7 in WC

Oxidizer Main Temp: 640 °F

Oxidizer High Temp: 602 °F

Element Temp: 759 °F

Inf water PH _____ pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 0.9 (0.50-1.0)

System Status: On (Arrival)

System Status: On (Departure)

Sample Collected: N

Bag Filters Replaced: N

Defoamer level: ~10 G

Room Temp: 65 °F

Surge Counter: 288

Run Times (hours)

Inlet pump 609 AST Pump 574 MS Pump 1

AST Blower 2225 Outlet Pump 724 GW Pumps \

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12/5/17 **Time:** 1345 **Temp:** 55

Total Discharge: 1,315,107 gal

Daily Discharge _____ gal

AST Pressure: 57.1 in WC

Oxidizer Main Temp: 641 °F

Oxidizer High Temp: 601.1 °F

Element Temp: 748 °F

Inf water PH 7.83 pH (7.0-9.0)

ıf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: 0.90 (0.50-1.0)

System Status: On (Arrival)

System Status: On (Departure)

Sample Collected: N

Bag Filters Replaced: N

Defoamer level: 10 G

Room Temp: 68 °F

Surge Counter: ~~360~~ 288

Run Times (hours)

Inlet pump 603 AST Pump 568 MS Pump 1

AST Blower 2201 Outlet Pump 717 GW Pumps _____

Maintenance Work Performed, Adjustments Made and Comments:

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-4-17 **Time:** _____ **Temp:** 33°

Total Discharge: 1300048 gal 21285 ÷3 **Mag Gauge Flow:** _____

Daily Discharge 7095 gal **System Status:** (0.50-1.0) OFF (*)
(Arrival)

AST Pressure: 60.4 in WC

System Status: ON
(Departure)

Oxidizer Main Temp: 648.7 °F

Oxidizer High Temp: 603.3 °F **Sample Collected:** NO

Element Temp: 734 °F **Bag Filters Replaced:** NO

Inf water PH 7.25 pH **Defoamer level:** 5 gals
(7.0-9.0)

Room Temp: 60 °F

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI **Surge Counter:** 288

Run Times (hours)

Inlet pump 595 AST Pump 557 MS Pump 1

AST Blower 2171 Outlet Pump 708 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

(*) moisture separator high level alarm 12/3/17 0236

Cell 2 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-1-17 **Time:** _____ **Temp:** 43°

Total Discharge: 1278763 gal

Daily Discharge 12,119 gal

AST Pressure: 59.0 in WC

Oxidizer Main Temp: 649.5 °F

Oxidizer High Temp: 608.0 °F

Element Temp: 734 °F

Inf water PH 7.35 pH (7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Mag Gauge Flow: .80 (0.50-1.0)

System Status: on (Arrival)

System Status: on (Departure)

Sample Collected: No

Bag Filters Replaced: yes

Defoamer level: 8 gals *

Room Temp: 58 °F

Surge Counter: 288

Run Times (hours)

Inlet pump 583 AST Pump 544 MS Pump 1

AST Blower 2128 Outlet Pump 696 GW Pumps #4 well on

Maintenance Work Performed, Adjustments Made and Comments:

* check defoamer pick up in bucket

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-22-17 **Time:** 0720 **Temp:** 39°

Total Discharge: 14749760 Gal

Daily Discharge: 30,254 Gal

AST Pressure: 61 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 99 °F

XP Room Temp: 63 °F

AST water PH _____ pH(7.0-9.0)

Mag Gauge Flow: _____ in WC (1.5-2.0)

Surge Counter: _____

System Status: (Arrival) Running

System Status: (Departure) OFF

Sample Collected: No

Bag Filters Replaced: Yes

Cartridge Filters Replaced: No

Defoamer Level: Filled

Acid Level: 1/2

Run Times

MS Pump 2651 Dual Phase _____ Aeration Blower 0

Booster Blower 5743 AST Blower 5743 AST Pump 2105

Inlet Pump 5318 Outlet Pump 3702 Chemical Feed Pumps 3317

Maintenance Work Performed, Adjustments Made and Comments:

Outlet tank high leveling

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-21-17 **Time:** 0740 **Temp:** 31°

Total Discharge: 14719506 Gal

Daily Discharge: 3,465 Gal

AST Pressure: 61 in WC

Dual Phase Vacuum: 20 in WC

Dual Phase Temp: 96 °F

XP Room Temp: 56 °F

AST water PH 7.7 pH(7.0-9.0)

Mag Gauge Flow: 1.75 in WC (1.5-2.0)

Surge Counter: 25182

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: Yes

Defoamer Level: Full

Acid Level: 1/2 drum

Run Times

MS Pump 2636 Dual Phase 5270 Aeration Blower 0

Booster Blower 5719 AST Blower 5719 AST Pump 2093

Inlet Pump 3298 Outlet Pump 3682 Chemical Feed Pumps 3297

Maintenance Work Performed, Adjustments Made and Comments:

Power sporadic 0630 AM, went in and out

Returned 0640

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-20-17 **Time:** 0700 **Temp:** 50°

Total Discharge: 14716041 Gal

Daily Discharge: 32,506 Gal

AST Pressure: 60 in WC

Dual Phase Vacuum: 28 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 72 °F

AST water PH 9.0 pH(7.0-9.0)

Mag Gauge Flow: 1.9 in WC (1.5-2.0)

Surge Counter: 25182

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Defoamer Level: Full

Acid Level: 1/2

Run Times

MS Pump 2634 Dual Phase 5267 Aeration Blower 0

Booster Blower 5695 AST Blower 5695 AST Pump 2092

Inlet Pump 3296 Outlet Pump 3680 Chemical Feed Pumps 3295

Maintenance Work Performed, Adjustments Made and Comments:

Experiencing Outlet tank high levels again

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-19-17 **Time:** 0730 **Temp:** 43°

Total Discharge: 14683535 Gal

Daily Discharge: 35,287 Gal

AST Pressure: 61.3 in WC

Dual Phase Vacuum: 20 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 68 °F

AST water PH 8.8 pH(7.0-9.0)

Mag Gauge Flow: 1.8 in WC (1.5-2.0)

Surge Counter: 25182

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Defoamer Level: Filled

Acid Level: 1/2

Run Times

MS Pump 2618

Dual Phase 5246

Aeration Blower 0

Booster Blower 5671

AST Blower 5671

AST Pump 2079

Inlet Pump 3276

Outlet Pump 3657

Chemical Feed Pumps 3275

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-18-17 **Time:** 0800 **Temp:** 38°

Total Discharge: 14648248 Gal

Daily Discharge: 37,643 (k3) Gal

AST Pressure: 62.1 in WC

Dual Phase Vacuum: 20.0 in WC

Dual Phase Temp: 99 °F

XP Room Temp: 65 °F

AST water PH 8.2 pH(7.0-9.0)

Mag Gauge Flow: 1.5 in WC (1.5-2.0)

Surge Counter: 25182

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: Yes

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Defoamer Level: 3/4

Acid Level: 3/4

Run Times

MS Pump 2601 Dual Phase 5223 Aeration Blower 0

Booster Blower 5648 AST Blower 5648 AST Pump 2066

Inlet Pump 3255 Outlet Pump 3634 Chemical Feed Pumps 3254

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-15-17 **Time:** 0730 **Temp:** 27°

Total Discharge: 14535317 Gal

Daily Discharge: 27,852 Gal

AST Pressure: 61 in WC

Dual Phase Vacuum: 20 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 60 °F

AST water PH 5 pH(7.0-9.0)

~~**Inf Bag Filter DP:**~~ 0 PSI

~~**Eff Bag Filter DP:**~~ 0 PSI

~~**Remaining Bag Filters:**~~ ~~#~~

Mag Gauge Flow: 1.8 (1.50-2.00)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: No

Bag Filters Replaced: Yes

Cartridge Filters Replaced: Yes

~~**Remianing Cartridge**~~

Surge Counter:

~~**Remaining Defoamer:**~~

Defoamer Level

Acid Level

Run Times

Inlet Pump 3191

Outlet Pump 3565

Booster Blower 5575

AST Blower 5575

MS Pump 2546

Aeration Blower 0

AST Pump 2023

Dual Phase 5150

Maintenance Work Performed, Adjustments Made and Comments:

Sporadic power Loss effected daily performance

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-14-17 **Time:** 0800 **Temp:** 38°

Total Discharge: 1,450,465 Gal

Daily Discharge: 17,115 Gal

AST Pressure: 62 in WC

Dual Phase Vacuum: 19.8 in WC

Dual Phase Temp: 98 °F

XP Room Temp: 58 °F

AST water PH 8.2 pH(7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Remaining Bag Filters: ✓ #

Mag Gauge Flow: 1.9 (1.50-2.00)

System Status: (Arrival) OFF

System Status: (Departure) Running @ 1230

Sample Collected: No

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge ✓ #

Surge Counter: 25180

Remaining Defoamer: 1/2

Run Times

Inlet Pump 3175 Outlet Pump 3548 Booster Blower 5557

AST Blower 5557 MS Pump 2532 Aeration Blower 0

AST Pump 2012 Dual Phase 5132

Maintenance Work Performed, Adjustments Made and Comments:

Power Loss @ 1747 on 12/13

Back on @ 1230

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-13-17 **Time:** 0810 **Temp:** 24°

Total Discharge: 14490350 Gal

Daily Discharge: 34,751 Gal

AST Pressure: 63.6 in WC

Dual Phase Vacuum: 19.9 in WC

Dual Phase Temp: 97 °F

XP Room Temp: 58 °F

AST water PH 8.05 pH(7.0-9.0)

Inf Bag Filter DP: 25/0 20/0 PSI

Eff Bag Filter DP: 0 0 PSI

Remaining Bag Filters: 24 #

Mag Gauge Flow: 1.80 (1.50-2.00)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected: Frozen sample port

Bag Filters Replaced: No

Cartridge Filters Replaced: No

Remianing Cartridge 25

Surge Counter: 25178

Remaining Defoamer: 3/4

Run Times

Inlet Pump 3166

Outlet Pump 3539

Booster Blower 5547

AST Blower 5547

MS Pump 2525

Aeration Blower 0

AST Pump 2006

Dual Phase 5122

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-12-17 **Time:** 0710 **Temp:** 43°

Total Discharge: 14,455,599 Gal

Daily Discharge: 19,580 Gal

AST Pressure: 58.2 in WC

Dual Phase Vacuum: 19.6 in WC

Dual Phase Temp: 100 °F

XP Room Temp: 64 °F

AST water PH 7.08 pH(7.0-9.0)

Inf Bag Filter DP: 0/40 0/18 PSI

Eff Bag Filter DP: 0/0 0/0 PSI

Remaining Bag Filters: 25 #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) Running

System Status: (Departure) Running

Sample Collected:

Bag Filters Replaced: No

Cartridge Filters Replaced:

Remianing Cartridge 25 #

Surge Counter: 25178

Remaining Defoamer: Full

Run Times

Inlet Pump 3147

Outlet Pump 3518

Booster Blower 5523

AST Blower 5522

MS Pump 2509

Aeration Blower 0

AST Pump 1993

Dual Phase 5100

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-11-17 **Time:** 1000 **Temp:** 39

Total Discharge:	14436019	Gal	**Mag Gauge Flow:**	1.80 (1.50-2.00)	
Daily Discharge:	22,577 x3	Gal	**System Status:** (Arrival)	Running - High leveled	
AST Pressure:	59	in WC			
Dual Phase Vacuum:	~~20~~ 0/20	in WC	**System Status:** (Departure)	Running	
Dual Phase Temp:	77/97	°F	**Sample Collected:**	No	
XP Room Temp:	69	°F	**Bag Filters Replaced:**	No	
AST water PH	7.14	pH(7.0-9.0)	**Cartridge Filters Replaced:**		
Inf Bag Filter DP:	9/20 10/0	PSI	**Remianing Cartridge**	1 box	
Eff Bag Filter DP:	0	PSI	**Surge Counter:**	25,178	
Remaining Bag Filters:	1/2 box	#	**Remaining Defoamer:**	Topped off	

Run Times

Inlet Pump	3137	Outlet Pump	3501	Booster Blower	5504
AST Blower	5503	MS Pump	2500	Aeration Blower	8
AST Pump	1986	Dual Phase	5081		

Maintenance Work Performed, Adjustments Made and Comments:

Outlet high level lead to all other tank high levels

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12/8/17 **Time:** 1535 **Temp:** 39

Total Discharge: 14,368,287 Gal

Daily Discharge: 22,577 Gal

AST Pressure: 60.1 in WC

Dual Phase Vacuum: 0.0 in WC

Dual Phase Temp: 87 °F

XP Room Temp: 66 °F

AST water PH 8.16 pH(7.0-9.0)

Inf Bag Filter DP: 0 PSI

Eff Bag Filter DP: 0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.55 (1.50-2.00)

System Status: (Arrival) Off

System Status: (Departure) Off

Sample Collected: N

Bag Filters Replaced: Y

Cartridge Filters Replaced: Y

Remianing Cartridge 1 Box #

Surge Counter: _____

Remaining Defoamer: 7 Gallons

Run Times

Inlet Pump 3101 Outlet Pump 3440 Booster Blower 5435

AST Blower 5434 MS Pump 2469 Aeration Blower 0

AST Pump 1962 Dual Phase 5045

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: _____ **Time:** _____ **Temp:** _____

Total Discharge: _____ Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: _____ PSI

Eff Bag Filter DP: _____ PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: _____ (1.50-2.00)

System Status: _____ (Arrival)

System Status: _____ (Departure)

Sample Collected: _____

Bag Filters Replaced: _____

Cartridge Filters Replaced: _____

Remianing Cartridge _____#

Surge Counter: _____

Remaining Defoamer: _____

Run Times

Inlet Pump_____ Outlet Pump_____ Booster Blower_____

AST Blower_____ MS Pump_____ Aeration Blower_____

AST Pump_____ Dual Phase_____

Maintenance Work Performed, Adjustments Made and Comments:

- System Down. Outlet Tank High Level. Pump not keeping up w/ H_2O Incoming to tank.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12/6/17 **Time:** 1430 **Temp:** 40

Total Discharge: 2,404,100 Gal

Daily Discharge: _____ Gal

AST Pressure: _____ in WC

Dual Phase Vacuum: _____ in WC

Dual Phase Temp: _____ °F

XP Room Temp: _____ °F

AST water PH _____ pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: _____ #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: On (Arrival)

System Status: On (Departure)

Sample Collected: N

Bag Filters Replaced: N

Cartridge Filters Replaced: N

Remianing Cartridge _____ #

Surge Counter: _____

Remaining Defoamer: ~8 Gallons

Run Times

Inlet Pump 3098 Outlet Pump 3435 Booster Blower 5391

AST Blower 5390 MS Pump 2466 Aeration Blower 0

AST Pump 1959 Dual Phase 5041

Maintenance Work Performed, Adjustments Made and Comments:

- System Down. Outlet Transfer Pump/Piping not pushing enough.

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12/5/17 **Time:** 1450 **Temp:** 55

Total Discharge: 2,383,000 Gal

Daily Discharge: _____ Gal

AST Pressure: 58.2 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 65 °F

AST water PH 8.38 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: 1 Box #

Mag Gauge Flow: 1.50 (1.50-2.00)

System Status: On (Arrival)

System Status: On (Departure)

Sample Collected: N

Bag Filters Replaced: Y

Cartridge Filters Replaced: Y

Remianing Cartridge 2 #

Surge Counter: _____

Remaining Defoamer: 10 Gallons

Run Times

Inlet Pump 3087 Outlet Pump 3416 Booster Blower 5366

AST Blower 5365 MS Pump 2457 Aeration Blower 0

AST Pump 1952 Dual Phase 5028

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-4-17 **Time:** _____ **Temp:** 33°

Total Discharge: 2355300 Gal 84300 ÷3

Daily Discharge: 28,100 Gal

AST Pressure: 61.0 in WC

Dual Phase Vacuum: 20.4 in WC

Dual Phase Temp: 102 °F

XP Room Temp: 72 °F

AST water PH 8.30 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: ✓ #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: (Arrival) on

System Status: (Departure) on

Sample Collected: NO

Bag Filters Replaced: NO

Cartridge Filters Replaced: NO

Remianing Cartridge ✓ #

Surge Counter: 25,178

Remaining Defoamer: _____

Run Times

Inlet Pump 3075 Outlet Pump 3394 Booster Blower 5343

AST Blower 5342 MS Pump 2447 Aeration Blower ✓

AST Pump 1944 Dual Phase 5012

Maintenance Work Performed, Adjustments Made and Comments:

Cell 5 GW Pump and Treat System Data Log

EnviroAnalytics Group

Date: 12-1-17 **Time:** _____ **Temp:** 43°

Total Discharge: 2271000 Gal

Daily Discharge: 22,200 Gal

AST Pressure: 61.1 in WC

Dual Phase Vacuum: 20.1 in WC

Dual Phase Temp: 101 °F

XP Room Temp: 69 °F

AST water PH 8.30 pH(7.0-9.0)

Inf Bag Filter DP: 0/0 PSI

Eff Bag Filter DP: 0/0 PSI

Remaining Bag Filters: ✓ #

Mag Gauge Flow: 1.75 (1.50-2.00)

System Status: on (Arrival)

System Status: on (Departure)

Sample Collected: NO

Bag Filters Replaced: yes

Cartridge Filters Replaced: yes

Remianing Cartridge ✓

Surge Counter: 25,178

Remaining Defoamer: 6 gals.

Run Times

Inlet Pump 3018 Outlet Pump 3321 Booster Blower 5263

AST Blower 5262 MS Pump 2411 Aeration Blower ✓

AST Pump 1915 Dual Phase 4933

Maintenance Work Performed, Adjustments Made and Comments:

APPENDIX B

2017 Lab Data

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 06, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
Sparrows Point Terminal
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Dear Mr. Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on March 22, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project:	COA 1st Quarter 2017
Pace Project No.:	30213913

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30213913001	**CO93**	Water	03/22/17 09:48	03/22/17 23:00
30213913002	**CO101-PZMxxx**	Water	03/22/17 10:35	03/22/17 23:00
30213913003	**CO30-PZM015**	Water	03/22/17 11:35	03/22/17 23:00
30213913004	**CO30-PZM060**	Water	03/22/17 12:18	03/22/17 23:00
30213913005	**CO104-PZMxxx**	Water	03/22/17 13:33	03/22/17 23:00
30213913006	**CO103-PZMxxx**	Water	03/22/17 14:24	03/22/17 23:00
30213913007	**CO102-PZMxxx**	Water	03/22/17 15:11	03/22/17 23:00
30213913008	**CO57-PZP002**	Water	03/22/17 15:36	03/22/17 23:00
30213913009	**TRIP BLANKS**	Water	03/22/17 00:01	03/22/17 23:00

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SAMPLE ANALYTE COUNT

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30213913001	**CO93**	EPA 8260B	LEL	53	PASI-PA
30213913002	**CO101-PZMxxx**	EPA 8260B	LEL	53	PASI-PA
30213913003	**CO30-PZM015**	EPA 8260B	LEL	53	PASI-PA
30213913004	**CO30-PZM060**	EPA 8260B	LEL	53	PASI-PA
30213913005	**CO104-PZMxxx**	EPA 8260B	LEL	53	PASI-PA
30213913006	**CO103-PZMxxx**	EPA 8260B	LEL	53	PASI-PA
30213913007	**CO102-PZMxxx**	EPA 8260B	LEL	53	PASI-PA
30213913008	**CO57-PZP002**	EPA 8260B	LEL	53	PASI-PA
30213913009	**TRIP BLANKS**	EPA 8260B	LEL	53	PASI-PA

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO93 **Lab ID: 30213913001** Collected: 03/22/17 09:48 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 19:37	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 19:37	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:37	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:37	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 19:37	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:37	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 19:37	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 19:37	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/23/17 19:37	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 19:37	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 19:37	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 19:37	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:37	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/23/17 19:37	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/23/17 19:37	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/23/17 19:37	108-10-1	
Acetone	**50.0 U**	ug/L	50.0	17.6	5		03/23/17 19:37	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/23/17 19:37	107-13-1	
Benzene	**180000**	ug/L	500	105	500		03/23/17 20:02	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 19:37	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/23/17 19:37	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 19:37	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 19:37	74-83-9	
Carbon disulfide	**18.1**	ug/L	5.0	1.7	5		03/23/17 19:37	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 19:37	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 19:37	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/23/17 19:37	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/23/17 19:37	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 19:37	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 19:37	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 19:37	74-95-3	
Ethylbenzene	**1430**	ug/L	5.0	1.2	5		03/23/17 19:37	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/23/17 19:37	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:37	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 19:37	75-09-2	
Naphthalene	**1970**	ug/L	10.0	1.1	5		03/23/17 19:37	91-20-3	
Styrene	**1600**	ug/L	5.0	0.85	5		03/23/17 19:37	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/23/17 19:37	127-18-4	
Toluene	**55400**	ug/L	500	105	500		03/23/17 20:02	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:37	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 19:37	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/23/17 19:37	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 19:37	75-01-4	
Xylene (Total)	**17800**	ug/L	1500	235	500		03/23/17 20:02	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 19:37	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 19:37	10061-01-5	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO93 **Lab ID: 30213913001** Collected: 03/22/17 09:48 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 19:37	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 19:37	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 19:37	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	78-117		5		03/23/17 19:37	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-128		5		03/23/17 19:37	17060-07-0	
Toluene-d8 (S)	97	%	59-140		5		03/23/17 19:37	2037-26-5	
Dibromofluoromethane (S)	95	%	66-132		5		03/23/17 19:37	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO101-PZMxxx **Lab ID: 30213913002** Collected: 03/22/17 10:35 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/23/17 16:12	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 16:12	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 16:12	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 16:12	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/23/17 16:12	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 16:12	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 16:12	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 16:12	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/23/17 16:12	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 16:12	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 16:12	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 16:12	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 16:12	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/23/17 16:12	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/23/17 16:12	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/23/17 16:12	108-10-1	
Acetone	**22.4**	ug/L	10.0	3.5	1		03/23/17 16:12	67-64-1	B
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/23/17 16:12	107-13-1	
Benzene	**17400**	ug/L	100	21.0	100		03/23/17 16:38	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/23/17 16:12	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 16:12	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 16:12	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 16:12	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/23/17 16:12	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 16:12	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 16:12	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/23/17 16:12	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/23/17 16:12	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/23/17 16:12	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 16:12	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 16:12	74-95-3	
Ethylbenzene	**21.3**	ug/L	1.0	0.24	1		03/23/17 16:12	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/23/17 16:12	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 16:12	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/23/17 16:12	75-09-2	
Naphthalene	**2150**	ug/L	200	22.0	100		03/23/17 16:38	91-20-3	
Styrene	**6.6**	ug/L	1.0	0.17	1		03/23/17 16:12	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/23/17 16:12	127-18-4	
Toluene	**1220**	ug/L	100	21.0	100		03/23/17 16:38	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 16:12	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/23/17 16:12	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/23/17 16:12	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/23/17 16:12	75-01-4	
Xylene (Total)	**249**	ug/L	3.0	0.47	1		03/23/17 16:12	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/23/17 16:12	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 16:12	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO101-PZMxxx **Lab ID: 30213913002** Collected: 03/22/17 10:35 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 16:12	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 16:12	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 16:12	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	104	%	78-117		1		03/23/17 16:12	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-128		1		03/23/17 16:12	17060-07-0	
Toluene-d8 (S)	101	%	59-140		1		03/23/17 16:12	2037-26-5	
Dibromofluoromethane (S)	99	%	66-132		1		03/23/17 16:12	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO30-PZM015 **Lab ID: 30213913003** Collected: 03/22/17 11:35 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 17:03	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:03	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:03	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:03	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 17:03	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:03	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 17:03	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 17:03	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/23/17 17:03	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 17:03	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 17:03	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 17:03	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:03	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/23/17 17:03	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/23/17 17:03	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/23/17 17:03	108-10-1	
Acetone	**46.2J**	ug/L	50.0	17.6	5		03/23/17 17:03	67-64-1	B
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/23/17 17:03	107-13-1	
Benzene	**52800**	ug/L	500	105	500		03/23/17 17:29	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:03	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/23/17 17:03	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 17:03	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:03	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/23/17 17:03	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 17:03	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 17:03	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/23/17 17:03	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/23/17 17:03	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:03	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 17:03	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 17:03	74-95-3	
Ethylbenzene	**71.3**	ug/L	5.0	1.2	5		03/23/17 17:03	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/23/17 17:03	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:03	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 17:03	75-09-2	
Naphthalene	**1830**	ug/L	10.0	1.1	5		03/23/17 17:03	91-20-3	
Styrene	**10.9**	ug/L	5.0	0.85	5		03/23/17 17:03	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/23/17 17:03	127-18-4	
Toluene	**3620**	ug/L	500	105	500		03/23/17 17:29	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:03	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 17:03	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/23/17 17:03	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 17:03	75-01-4	
Xylene (Total)	**1060**	ug/L	15.0	2.4	5		03/23/17 17:03	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 17:03	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 17:03	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO30-PZM015 **Lab ID: 30213913003** Collected: 03/22/17 11:35 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 17:03	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 17:03	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 17:03	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	78-117		5		03/23/17 17:03	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-128		5		03/23/17 17:03	17060-07-0	
Toluene-d8 (S)	104	%	59-140		5		03/23/17 17:03	2037-26-5	
Dibromofluoromethane (S)	96	%	66-132		5		03/23/17 17:03	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO30-PZM060 **Lab ID: 30213913004** Collected: 03/22/17 12:18 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/23/17 14:55	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 14:55	71-55-6	R1
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 14:55	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 14:55	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/23/17 14:55	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 14:55	75-35-4	R1
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 14:55	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 14:55	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/23/17 14:55	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 14:55	95-50-1	R1
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 14:55	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 14:55	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 14:55	106-46-7	R1
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/23/17 14:55	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/23/17 14:55	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/23/17 14:55	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/23/17 14:55	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/23/17 14:55	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 14:55	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/23/17 14:55	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 14:55	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 14:55	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 14:55	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/23/17 14:55	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 14:55	56-23-5	R1
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 14:55	108-90-7	R1
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/23/17 14:55	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/23/17 14:55	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/23/17 14:55	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 14:55	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 14:55	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 14:55	100-41-4	ML,R1
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/23/17 14:55	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 14:55	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/23/17 14:55	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.22	1		03/23/17 14:55	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 14:55	100-42-5	R1
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/23/17 14:55	127-18-4	R1
Toluene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 14:55	108-88-3	R1
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 14:55	79-01-6	R1
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/23/17 14:55	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/23/17 14:55	108-05-4	MH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/23/17 14:55	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.47	1		03/23/17 14:55	1330-20-7	RS
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/23/17 14:55	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 14:55	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO30-PZM060 **Lab ID: 30213913004** Collected: 03/22/17 12:18 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 14:55	156-60-5	R1
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 14:55	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 14:55	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	107	%	78-117		1		03/23/17 14:55	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-128		1		03/23/17 14:55	17060-07-0	
Toluene-d8 (S)	102	%	59-140		1		03/23/17 14:55	2037-26-5	
Dibromofluoromethane (S)	105	%	66-132		1		03/23/17 14:55	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO104-PZMxxx **Lab ID: 30213913005** Collected: 03/22/17 13:33 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/23/17 15:21	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 15:21	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:21	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:21	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/23/17 15:21	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 15:21	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:21	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 15:21	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/23/17 15:21	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:21	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 15:21	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:21	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:21	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/23/17 15:21	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/23/17 15:21	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/23/17 15:21	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/23/17 15:21	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/23/17 15:21	107-13-1	
Benzene	**16.5**	ug/L	1.0	0.21	1		03/23/17 15:21	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/23/17 15:21	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 15:21	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 15:21	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 15:21	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/23/17 15:21	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:21	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 15:21	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/23/17 15:21	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/23/17 15:21	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/23/17 15:21	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:21	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:21	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 15:21	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/23/17 15:21	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:21	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/23/17 15:21	75-09-2	
Naphthalene	**5.5**	ug/L	2.0	0.22	1		03/23/17 15:21	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:21	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/23/17 15:21	127-18-4	
Toluene	**1.1**	ug/L	1.0	0.21	1		03/23/17 15:21	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 15:21	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/23/17 15:21	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/23/17 15:21	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/23/17 15:21	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.47	1		03/23/17 15:21	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/23/17 15:21	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 15:21	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO104-PZMxxx **Lab ID: 30213913005** Collected: 03/22/17 13:33 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:21	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:21	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 15:21	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	106	%	78-117		1		03/23/17 15:21	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-128		1		03/23/17 15:21	17060-07-0	
Toluene-d8 (S)	101	%	59-140		1		03/23/17 15:21	2037-26-5	
Dibromofluoromethane (S)	104	%	66-132		1		03/23/17 15:21	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO103-PZMxxx **Lab ID: 30213913006** Collected: 03/22/17 14:24 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 17:55	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:55	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:55	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:55	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 17:55	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:55	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 17:55	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 17:55	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/23/17 17:55	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 17:55	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 17:55	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 17:55	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:55	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/23/17 17:55	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/23/17 17:55	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/23/17 17:55	108-10-1	
Acetone	**76.1**	ug/L	50.0	17.6	5		03/23/17 17:55	67-64-1	B
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/23/17 17:55	107-13-1	
Benzene	**27700**	ug/L	500	105	500		03/23/17 18:20	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:55	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/23/17 17:55	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 17:55	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:55	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/23/17 17:55	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 17:55	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 17:55	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/23/17 17:55	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/23/17 17:55	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:55	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 17:55	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 17:55	74-95-3	
Ethylbenzene	**55.5**	ug/L	5.0	1.2	5		03/23/17 17:55	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/23/17 17:55	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:55	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 17:55	75-09-2	
Naphthalene	**12300**	ug/L	1000	110	500		03/23/17 18:20	91-20-3	
Styrene	**10.4**	ug/L	5.0	0.85	5		03/23/17 17:55	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/23/17 17:55	127-18-4	
Toluene	**1980**	ug/L	5.0	1.0	5		03/23/17 17:55	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:55	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 17:55	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/23/17 17:55	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 17:55	75-01-4	
Xylene (Total)	**960**	ug/L	15.0	2.4	5		03/23/17 17:55	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 17:55	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 17:55	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO103-PZMxxx **Lab ID: 30213913006** Collected: 03/22/17 14:24 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 17:55	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 17:55	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 17:55	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	105	%	78-117		5		03/23/17 17:55	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-128		5		03/23/17 17:55	17060-07-0	
Toluene-d8 (S)	105	%	59-140		5		03/23/17 17:55	2037-26-5	
Dibromofluoromethane (S)	99	%	66-132		5		03/23/17 17:55	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO102-PZMxxx **Lab ID: 30213913007** Collected: 03/22/17 15:11 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 18:46	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 18:46	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:46	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:46	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 18:46	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:46	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 18:46	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 18:46	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/23/17 18:46	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 18:46	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 18:46	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 18:46	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:46	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/23/17 18:46	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/23/17 18:46	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/23/17 18:46	108-10-1	
Acetone	**67.7**	ug/L	50.0	17.6	5		03/23/17 18:46	67-64-1	B
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/23/17 18:46	107-13-1	
Benzene	**15700**	ug/L	500	105	500		03/23/17 19:11	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 18:46	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/23/17 18:46	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 18:46	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 18:46	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/23/17 18:46	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 18:46	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 18:46	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/23/17 18:46	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/23/17 18:46	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 18:46	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 18:46	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 18:46	74-95-3	
Ethylbenzene	**19.6**	ug/L	5.0	1.2	5		03/23/17 18:46	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/23/17 18:46	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:46	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 18:46	75-09-2	
Naphthalene	**875**	ug/L	10.0	1.1	5		03/23/17 18:46	91-20-3	
Styrene	**6.1**	ug/L	5.0	0.85	5		03/23/17 18:46	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/23/17 18:46	127-18-4	
Toluene	**1150**	ug/L	5.0	1.0	5		03/23/17 18:46	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:46	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 18:46	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/23/17 18:46	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 18:46	75-01-4	
Xylene (Total)	**238**	ug/L	15.0	2.4	5		03/23/17 18:46	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 18:46	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 18:46	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO102-PZMxxx **Lab ID: 30213913007** Collected: 03/22/17 15:11 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 18:46	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 18:46	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 18:46	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	109	%	78-117		5		03/23/17 18:46	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-128		5		03/23/17 18:46	17060-07-0	
Toluene-d8 (S)	106	%	59-140		5		03/23/17 18:46	2037-26-5	
Dibromofluoromethane (S)	97	%	66-132		5		03/23/17 18:46	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO57-PZP002 **Lab ID: 30213913008** Collected: 03/22/17 15:36 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/23/17 15:47	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 15:47	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:47	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:47	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/23/17 15:47	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 15:47	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:47	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 15:47	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/23/17 15:47	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:47	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 15:47	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:47	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:47	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/23/17 15:47	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/23/17 15:47	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/23/17 15:47	108-10-1	
Acetone	**33.8**	ug/L	10.0	3.5	1		03/23/17 15:47	67-64-1	B
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/23/17 15:47	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:47	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/23/17 15:47	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 15:47	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 15:47	75-25-2	
Bromomethane	**7.5**	ug/L	1.0	0.53	1		03/23/17 15:47	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/23/17 15:47	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:47	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 15:47	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/23/17 15:47	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/23/17 15:47	67-66-3	
Chloromethane	**3.0**	ug/L	1.0	0.51	1		03/23/17 15:47	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:47	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:47	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 15:47	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/23/17 15:47	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:47	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/23/17 15:47	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.22	1		03/23/17 15:47	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:47	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/23/17 15:47	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:47	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 15:47	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/23/17 15:47	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/23/17 15:47	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/23/17 15:47	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.47	1		03/23/17 15:47	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/23/17 15:47	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 15:47	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: CO57-PZP002 **Lab ID: 30213913008** Collected: 03/22/17 15:36 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:47	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:47	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 15:47	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	105	%	78-117		1		03/23/17 15:47	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-128		1		03/23/17 15:47	17060-07-0	
Toluene-d8 (S)	99	%	59-140		1		03/23/17 15:47	2037-26-5	
Dibromofluoromethane (S)	109	%	66-132		1		03/23/17 15:47	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: TRIP BLANKS **Lab ID: 30213913009** Collected: 03/22/17 00:01 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/23/17 12:22	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 12:22	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:22	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:22	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/23/17 12:22	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 12:22	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 12:22	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 12:22	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/23/17 12:22	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 12:22	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 12:22	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 12:22	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:22	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/23/17 12:22	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/23/17 12:22	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/23/17 12:22	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/23/17 12:22	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/23/17 12:22	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:22	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/23/17 12:22	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 12:22	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 12:22	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 12:22	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/23/17 12:22	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 12:22	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 12:22	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/23/17 12:22	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/23/17 12:22	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/23/17 12:22	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 12:22	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 12:22	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 12:22	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/23/17 12:22	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:22	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/23/17 12:22	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.22	1		03/23/17 12:22	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 12:22	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/23/17 12:22	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:22	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 12:22	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/23/17 12:22	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/23/17 12:22	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/23/17 12:22	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.47	1		03/23/17 12:22	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/23/17 12:22	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 12:22	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Sample: TRIP BLANKS **Lab ID: 30213913009** Collected: 03/22/17 00:01 Received: 03/22/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 12:22	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 12:22	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 12:22	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	105	%	78-117		1		03/23/17 12:22	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-128		1		03/23/17 12:22	17060-07-0	
Toluene-d8 (S)	103	%	59-140		1		03/23/17 12:22	2037-26-5	
Dibromofluoromethane (S)	103	%	66-132		1		03/23/17 12:22	1868-53-7	

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

QC Batch: 253060 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30213913001, 30213913002, 30213913003, 30213913004, 30213913005, 30213913006, 30213913007, 30213913008, 30213913009

METHOD BLANK: 1245019 | Matrix: Water
Associated Lab Samples: 30213913001, 30213913002, 30213913003, 30213913004, 30213913005, 30213913006, 30213913007, 30213913008, 30213913009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.36	03/23/17 11:56	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.53	03/23/17 11:56	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.21	03/23/17 11:56	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.21	03/23/17 11:56	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.37	03/23/17 11:56	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.20	03/23/17 11:56	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.47	03/23/17 11:56	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.54	03/23/17 11:56	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.22	03/23/17 11:56	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.17	03/23/17 11:56	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.30	03/23/17 11:56	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.29	03/23/17 11:56	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	03/23/17 11:56	
2-Butanone (MEK)	ug/L	10.0 U	10.0	2.4	03/23/17 11:56	
2-Hexanone	ug/L	10.0 U	10.0	0.25	03/23/17 11:56	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.32	03/23/17 11:56	
Acetone	ug/L	5.6J	10.0	3.5	03/23/17 11:56	C9
Acrylonitrile	ug/L	4.0 U	4.0	0.47	03/23/17 11:56	
Benzene	ug/L	1.0 U	1.0	0.21	03/23/17 11:56	
Bromochloromethane	ug/L	1.0 U	1.0	0.52	03/23/17 11:56	
Bromodichloromethane	ug/L	1.0 U	1.0	0.24	03/23/17 11:56	
Bromoform	ug/L	1.0 U	1.0	0.30	03/23/17 11:56	
Bromomethane	ug/L	1.0 U	1.0	0.53	03/23/17 11:56	
Carbon disulfide	ug/L	1.0 U	1.0	0.34	03/23/17 11:56	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.47	03/23/17 11:56	
Chlorobenzene	ug/L	1.0 U	1.0	0.14	03/23/17 11:56	
Chloroethane	ug/L	1.0 U	1.0	0.68	03/23/17 11:56	
Chloroform	ug/L	1.0 U	1.0	0.40	03/23/17 11:56	
Chloromethane	ug/L	1.0 U	1.0	0.51	03/23/17 11:56	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.56	03/23/17 11:56	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	03/23/17 11:56	
Dibromochloromethane	ug/L	1.0 U	1.0	0.29	03/23/17 11:56	
Dibromomethane	ug/L	1.0 U	1.0	0.47	03/23/17 11:56	
Ethylbenzene	ug/L	1.0 U	1.0	0.24	03/23/17 11:56	
Iodomethane	ug/L	50.0 U	50.0	0.62	03/23/17 11:56	
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.21	03/23/17 11:56	
Methylene Chloride	ug/L	1.0 U	1.0	0.55	03/23/17 11:56	
Naphthalene	ug/L	2.0 U	2.0	0.22	03/23/17 11:56	
Styrene	ug/L	1.0 U	1.0	0.17	03/23/17 11:56	
Tetrachloroethene	ug/L	1.0 U	1.0	0.43	03/23/17 11:56	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

METHOD BLANK: 1245019 Matrix: Water

Associated Lab Samples: 30213913001, 30213913002, 30213913003, 30213913004, 30213913005, 30213913006, 30213913007, 30213913008, 30213913009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.21	03/23/17 11:56	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.29	03/23/17 11:56	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	03/23/17 11:56	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.54	03/23/17 11:56	
Trichloroethene	ug/L	1.0 U	1.0	0.20	03/23/17 11:56	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.31	03/23/17 11:56	
Vinyl acetate	ug/L	10.0 U	10.0	0.40	03/23/17 11:56	
Vinyl chloride	ug/L	1.0 U	1.0	0.33	03/23/17 11:56	
Xylene (Total)	ug/L	3.0 U	3.0	0.47	03/23/17 11:56	
1,2-Dichloroethane-d4 (S)	%	107	70-128		03/23/17 11:56	
4-Bromofluorobenzene (S)	%	107	78-117		03/23/17 11:56	
Dibromofluoromethane (S)	%	101	66-132		03/23/17 11:56	
Toluene-d8 (S)	%	101	59-140		03/23/17 11:56	

LABORATORY CONTROL SAMPLE: 1245020

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	17.6	88	72-118	
1,1,1-Trichloroethane	ug/L	20	20.5	102	79-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.7	99	64-130	
1,1,2-Trichloroethane	ug/L	20	19.5	97	78-118	
1,1-Dichloroethane	ug/L	20	19.7	98	77-124	
1,1-Dichloroethene	ug/L	20	17.3	87	74-127	
1,2,3-Trichloropropane	ug/L	20	19.6	98	70-123	
1,2-Dibromo-3-chloropropane	ug/L	20	18.6	93	53-133	
1,2-Dibromoethane (EDB)	ug/L	20	18.7	94	69-126	
1,2-Dichlorobenzene	ug/L	20	20.3	101	83-117	
1,2-Dichloroethane	ug/L	20	19.9	100	73-118	
1,2-Dichloropropane	ug/L	20	21.1	105	77-126	
1,4-Dichlorobenzene	ug/L	20	18.6	93	83-119	
2-Butanone (MEK)	ug/L	20	18.2	91	55-134	
2-Hexanone	ug/L	20	21.5	107	78-156	
4-Methyl-2-pentanone (MIBK)	ug/L	20	18.8	94	63-121	
Acetone	ug/L	20	25.0	125	51-144	
Acrylonitrile	ug/L	20	26.5	132	39-170	
Benzene	ug/L	20	17.8	89	80-113	
Bromochloromethane	ug/L	20	18.1	90	78-114	
Bromodichloromethane	ug/L	20	20.9	104	78-121	
Bromoform	ug/L	20	20.9	104	71-130	
Bromomethane	ug/L	20	18.6	93	58-154	
Carbon disulfide	ug/L	20	18.5	93	66-152	
Carbon tetrachloride	ug/L	20	22.6	113	69-133	
Chlorobenzene	ug/L	20	20.1	101	85-116	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

LABORATORY CONTROL SAMPLE: 1245020

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	18.3	92	76-136	
Chloroform	ug/L	20	18.1	91	76-118	
Chloromethane	ug/L	20	20.7	104	67-148	
cis-1,2-Dichloroethene	ug/L	20	18.8	94	77-126	
cis-1,3-Dichloropropene	ug/L	20	20.3	101	75-119	
Dibromochloromethane	ug/L	20	20.3	101	66-131	
Dibromomethane	ug/L	20	20.4	102	76-121	
Ethylbenzene	ug/L	20	18.0	90	80-115	
Iodomethane	ug/L	20	14.1J	70	10-149	
Methyl-tert-butyl ether	ug/L	20	19.1	95	82-126	
Methylene Chloride	ug/L	20	20.7	104	61-142	
Naphthalene	ug/L	20	16.5	82	61-139	
Styrene	ug/L	20	18.7	94	84-120	
Tetrachloroethene	ug/L	20	18.6	93	82-120	
Toluene	ug/L	20	18.0	90	82-116	
trans-1,2-Dichloroethene	ug/L	20	19.4	97	76-125	
trans-1,3-Dichloropropene	ug/L	20	19.7	99	73-119	
trans-1,4-Dichloro-2-butene	ug/L	20	15.0	75	27-116	
Trichloroethene	ug/L	20	19.0	95	84-116	
Trichlorofluoromethane	ug/L	20	18.8	94	59-138	
Vinyl acetate	ug/L	20	23.7	118	10-175	
Vinyl chloride	ug/L	20	18.1	91	63-133	
Xylene (Total)	ug/L	60	55.1	92	82-115	
1,2-Dichloroethane-d4 (S)	%			101	70-128	
4-Bromofluorobenzene (S)	%			104	78-117	
Dibromofluoromethane (S)	%			103	66-132	
Toluene-d8 (S)	%			101	59-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1245290 1245291

Parameter	Units	30213913004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	20	20	12.7	16.9	63	85	52-120	29	30	
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	14.2	20.9	71	104	54-140	38	30	R1
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	16.8	18.3	84	92	54-124	9	30	
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	15.7	18.1	78	90	58-120	14	30	
1,1-Dichloroethane	ug/L	1.0 U	20	20	14.3	19.4	71	97	55-133	30	30	
1,1-Dichloroethene	ug/L	1.0 U	20	20	11.7	17.2	59	86	48-141	38	30	R1
1,2,3-Trichloropropane	ug/L	1.0 U	20	20	16.7	18.2	84	91	51-116	8	30	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	20	20	16.7	17.6	83	88	23-126	5	30	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	20	20	15.1	17.7	76	88	58-115	16	30	
1,2-Dichlorobenzene	ug/L	1.0 U	20	20	14.2	19.6	71	98	57-124	32	30	R1
1,2-Dichloroethane	ug/L	1.0 U	20	20	16.2	18.7	81	93	58-123	14	30	
1,2-Dichloropropane	ug/L	1.0 U	20	20	15.4	20.0	77	100	55-125	26	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1245290 1245291

Parameter	Units	30213913004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	1.0 U	20	20	13.0	18.0	65	90	61-111	32	30	R1
2-Butanone (MEK)	ug/L	10.0 U	20	20	18.3	16.6	91	83	43-128	9	30	
2-Hexanone	ug/L	10.0 U	20	20	25.1	22.0	125	110	43-135	13	30	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	20	20	20.1	17.8	100	89	47-123	12	30	
Acetone	ug/L	10.0 U	20	20	25.4	26.4	127	132	10-150	4	30	
Acrylonitrile	ug/L	4.0 U	20	20	24.2	21.3	121	107	31-182	13	30	
Benzene	ug/L	1.0 U	20	20	13.8	18.5	69	93	63-123	29	30	
Bromochloromethane	ug/L	1.0 U	20	20	14.3	17.4	72	87	42-149	19	30	
Bromodichloromethane	ug/L	1.0 U	20	20	15.3	20.0	76	100	55-127	27	30	
Bromoform	ug/L	1.0 U	20	20	16.3	18.2	81	91	44-131	11	30	
Bromomethane	ug/L	1.0 U	20	20	19.7	20.8	98	104	10-149	5	30	
Carbon disulfide	ug/L	1.0 U	20	20	18.1	15.1	91	76	47-158	18	30	
Carbon tetrachloride	ug/L	1.0 U	20	20	15.6	22.9	78	115	44-155	38	30	R1
Chlorobenzene	ug/L	1.0 U	20	20	14.0	19.1	70	96	57-121	31	30	R1
Chloroethane	ug/L	1.0 U	20	20	20.3	22.4	102	112	57-156	10	30	
Chloroform	ug/L	1.0 U	20	20	13.5	17.6	67	88	56-132	26	30	
Chloromethane	ug/L	1.0 U	20	20	22.4	21.7	112	109	42-163	3	30	
cis-1,2-Dichloroethene	ug/L	1.0 U	20	20	13.6	18.3	68	91	46-139	29	30	
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	14.9	18.8	74	94	55-119	24	30	
Dibromochloromethane	ug/L	1.0 U	20	20	15.7	18.4	78	92	52-129	16	30	
Dibromomethane	ug/L	1.0 U	20	20	17.1	19.8	86	99	52-120	14	30	
Ethylbenzene	ug/L	1.0 U	20	20	12.3	17.5	61	88	70-120	35	30	ML,R1
Iodomethane	ug/L	50.0 U	20	20	17.5J	16.3J	88	81	10-177		30	
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	18.3	15.4	92	77	63-143	17	30	
Methylene Chloride	ug/L	1.0 U	20	20	15.3	19.0	76	95	38-134	22	30	
Naphthalene	ug/L	2.0 U	20	20	15.5	19.0	77	95	55-122	20	30	
Styrene	ug/L	1.0 U	20	20	13.0	18.2	65	91	49-135	33	30	R1
Tetrachloroethene	ug/L	1.0 U	20	20	13.3	18.8	67	94	53-125	34	30	R1
Toluene	ug/L	1.0 U	20	20	13.2	18.1	66	91	66-124	32	30	R1
trans-1,2-Dichloroethene	ug/L	1.0 U	20	20	13.7	18.9	68	95	52-136	32	30	R1
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	14.9	17.8	74	89	54-118	18	30	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	20	20	12.6	10.1	63	50	19-116	22	30	
Trichloroethene	ug/L	1.0 U	20	20	13.6	19.0	68	95	50-127	33	30	R1
Trichlorofluoromethane	ug/L	1.0 U	20	20	21.2	21.2	106	106	63-167	0	30	
Vinyl acetate	ug/L	10.0 U	20	20	24.2	22.9	121	115	10-49	6	30	MH
Vinyl chloride	ug/L	1.0 U	20	20	20.8	20.4	104	102	54-149	2	30	
Xylene (Total)	ug/L	3.0 U	60	60	37.7	53.8	63	90	68-123	35	30	RS
1,2-Dichloroethane-d4 (S)	%						103	106	70-128			
4-Bromofluorobenzene (S)	%						106	105	78-117			
Dibromofluoromethane (S)	%						106	102	66-132			
Toluene-d8 (S)	%						100	99	59-140			

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

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.

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
C9	Common Laboratory Contaminant.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1	RPD value was outside control limits.
RS	The RPD value in one of the constituent analytes was outside the control limits.

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Greensburg, PA 15601
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA 1st Quarter 2017
Pace Project No.: 30213913

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30213913001	**CO93**	EPA 8260B	253060		
30213913002	**CO101-PZMxxx**	EPA 8260B	253060		
30213913003	**CO30-PZM015**	EPA 8260B	253060		
30213913004	**CO30-PZM060**	EPA 8260B	253060		
30213913005	**CO104-PZMxxx**	EPA 8260B	253060		
30213913006	**CO103-PZMxxx**	EPA 8260B	253060		
30213913007	**CO102-PZMxxx**	EPA 8260B	253060		
30213913008	**CO57-PZP002**	EPA 8260B	253060		
30213913009	**TRIP BLANKS**	EPA 8260B	253060		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

30213913

Section A
Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone: 314-620-3056	Fax:
Requested Due Date/TAT:	

Section B
Required Project Information:

Report To:	James Calenda
Copy To:	
Purchase Order No.:	EAG-SPT-6034
Project Name:	COA 1st Quarter 2017
Project Number:	

Section C
Invoice Information:

Attention:	Laura Sargent
Company Name:	Enviro Analytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

Page: 1 of 1

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: ID

Section D
Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

WO#:30213913

30213913

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	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): VOC + Napthalene 8260	Resid	Pace Project No./ Lab I.D.
1	CO93	WT	G			3/22/17	948		3				X					X		001
2	CO101-PZMxxx	WT	G			3/22/17	1035		3				X					X		002
3	CO30-PZM015	WT	G			3/22/17	1135		3				X					X		003
4	CO30-PZM060	WT	G			3/22/17	1218		3				X					X		004
5	CO104-PZMxxx	WT	G			3/22/17	1333		3				X					X		005
6	CO103-PZMxxx	WT	G			3/22/17	1424		3				X					X		006
7	CO102-PZMxxx	WT	G			3/22/17	1511		3				X					X		007
8	CO57-PZP002	WT	G			3/22/17	1536		3				X					X		008
9	TRIP BLANKS	WT																		009
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
No Data Package Needed	EAG	3/22/17	1650		3/22/17	1750
	Pace	3/22/17	2020	Pace	3/22/17	2020
	Pace	3/22/17	2300	Pace	3/22/17	2300

SAMPLE CONDITIONS	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	1.5	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jeff Wilson
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 3/22/17

*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 on any invoices not paid within 30 days.

F-ALL-Q-020rev.06, 2-Feb-2007

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Sparrows

Project # 30213913

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Tracking #: NA

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 7 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.6 °C Correction Factor: -0.1 °C Final Temp: 1.5 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: PC 3/22/17

Comments:	Yes	No	N/A		
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:	✓			4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:	✓			8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used:	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Organic Samples checked for dechlorination:			✓	13.	
Filtered volume received for Dissolved tests			✓	14.	
All containers have been checked for preservation.			✓	15.	
All containers needing preservation are found to be in compliance with EPA recommendation.			✓		
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed PC	Date/time of preservation 3/22/17
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):	✓			16.	
Trip Blank Present:	✓			17.	
Trip Blank Custody Seals Present	✓				
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: PC	Date: 3/22/17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 04, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
Sparrows Point Terminal
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Dear Mr. Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on March 21, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30213826001	**CO42-PZM004**	Water	03/21/17 09:47	03/21/17 23:30
30213826002	**CO40-PZM008**	Water	03/21/17 10:36	03/21/17 23:30
30213826003	**CO39-PZM007**	Water	03/21/17 11:20	03/21/17 23:30
30213826004	**CO39-PZM042**	Water	03/21/17 11:57	03/21/17 23:30
30213826005	**CO41-PZM036**	Water	03/21/17 13:24	03/21/17 23:30
30213826006	**CO41-PZM001**	Water	03/21/17 14:10	03/21/17 23:30
30213826007	**CO02-PZM006**	Water	03/21/17 15:10	03/21/17 23:30
30213826008	**CO18-PZM006**	Water	03/21/17 15:47	03/21/17 23:30
30213826009	**Trip Blanks**	Water	03/21/17 00:01	03/21/17 23:30

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SAMPLE ANALYTE COUNT

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30213826001	**CO42-PZM004**	EPA 8260B	LEL	53	PASI-PA
30213826002	**CO40-PZM008**	EPA 8260B	LEL	53	PASI-PA
30213826003	**CO39-PZM007**	EPA 8260B	LEL	53	PASI-PA
30213826004	**CO39-PZM042**	EPA 8260B	LEL	53	PASI-PA
30213826005	**CO41-PZM036**	EPA 8260B	LEL	53	PASI-PA
30213826006	**CO41-PZM001**	EPA 8260B	LEL	53	PASI-PA
30213826007	**CO02-PZM006**	EPA 8260B	LEL	53	PASI-PA
30213826008	**CO18-PZM006**	EPA 8260B	LEL	53	PASI-PA
30213826009	**Trip Blanks**	EPA 8260B	LEL	53	PASI-PA

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO42-PZM004 **Lab ID: 30213826001** Collected: 03/21/17 09:47 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/27/17 15:19	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 15:19	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:19	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:19	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/27/17 15:19	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 15:19	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 15:19	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 15:19	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/27/17 15:19	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 15:19	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 15:19	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 15:19	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:19	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/27/17 15:19	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/27/17 15:19	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/27/17 15:19	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/27/17 15:19	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/27/17 15:19	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:19	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/27/17 15:19	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 15:19	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 15:19	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 15:19	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/27/17 15:19	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 15:19	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 15:19	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/27/17 15:19	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/27/17 15:19	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/27/17 15:19	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 15:19	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 15:19	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 15:19	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/27/17 15:19	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:19	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/27/17 15:19	75-09-2	
Naphthalene	**6.1**	ug/L	2.0	0.22	1		03/27/17 15:19	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 15:19	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/27/17 15:19	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:19	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 15:19	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/27/17 15:19	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/27/17 15:19	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/27/17 15:19	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.47	1		03/27/17 15:19	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/27/17 15:19	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 15:19	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO42-PZM004 **Lab ID: 30213826001** Collected: 03/21/17 09:47 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 15:19	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 15:19	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 15:19	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	112	%	78-117		1		03/27/17 15:19	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-128		1		03/27/17 15:19	17060-07-0	
Toluene-d8 (S)	102	%	59-140		1		03/27/17 15:19	2037-26-5	
Dibromofluoromethane (S)	104	%	66-132		1		03/27/17 15:19	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO40-PZM008 **Lab ID: 30213826002** Collected: 03/21/17 10:36 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 16:10	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 16:10	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 16:10	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 16:10	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 16:10	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 16:10	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 16:10	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 16:10	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/27/17 16:10	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 16:10	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 16:10	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 16:10	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 16:10	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/27/17 16:10	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/27/17 16:10	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/27/17 16:10	108-10-1	
Acetone	**64.0**	ug/L	50.0	17.6	5		03/27/17 16:10	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/27/17 16:10	107-13-1	
Benzene	**302**	ug/L	5.0	1.0	5		03/27/17 16:10	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 16:10	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/27/17 16:10	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 16:10	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 16:10	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/27/17 16:10	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 16:10	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 16:10	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/27/17 16:10	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/27/17 16:10	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 16:10	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 16:10	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 16:10	74-95-3	
Ethylbenzene	**4.4J**	ug/L	5.0	1.2	5		03/27/17 16:10	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/27/17 16:10	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 16:10	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 16:10	75-09-2	
Naphthalene	**287**	ug/L	10.0	1.1	5		03/27/17 16:10	91-20-3	
Styrene	**4.1J**	ug/L	5.0	0.85	5		03/27/17 16:10	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/27/17 16:10	127-18-4	
Toluene	**89.2**	ug/L	5.0	1.0	5		03/27/17 16:10	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 16:10	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 16:10	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/27/17 16:10	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 16:10	75-01-4	
Xylene (Total)	**48.4**	ug/L	15.0	2.4	5		03/27/17 16:10	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 16:10	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 16:10	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO40-PZM008 **Lab ID: 30213826002** Collected: 03/21/17 10:36 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 16:10	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 16:10	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 16:10	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	106	%	78-117		5		03/27/17 16:10	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-128		5		03/27/17 16:10	17060-07-0	
Toluene-d8 (S)	104	%	59-140		5		03/27/17 16:10	2037-26-5	
Dibromofluoromethane (S)	103	%	66-132		5		03/27/17 16:10	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO39-PZM007 **Lab ID: 30213826003** Collected: 03/21/17 11:20 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/27/17 14:28	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 14:28	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 14:28	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 14:28	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/27/17 14:28	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 14:28	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 14:28	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 14:28	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/27/17 14:28	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 14:28	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 14:28	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 14:28	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 14:28	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/27/17 14:28	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/27/17 14:28	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/27/17 14:28	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/27/17 14:28	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/27/17 14:28	107-13-1	
Benzene	**386**	ug/L	5.0	1.0	5		03/27/17 14:54	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/27/17 14:28	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 14:28	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 14:28	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 14:28	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/27/17 14:28	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 14:28	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 14:28	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/27/17 14:28	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/27/17 14:28	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/27/17 14:28	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 14:28	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 14:28	74-95-3	
Ethylbenzene	**2.8**	ug/L	1.0	0.24	1		03/27/17 14:28	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/27/17 14:28	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 14:28	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/27/17 14:28	75-09-2	
Naphthalene	**676**	ug/L	10.0	1.1	5		03/27/17 14:54	91-20-3	
Styrene	**1.5**	ug/L	1.0	0.17	1		03/27/17 14:28	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/27/17 14:28	127-18-4	
Toluene	**37.2**	ug/L	1.0	0.21	1		03/27/17 14:28	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 14:28	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/27/17 14:28	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/27/17 14:28	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/27/17 14:28	75-01-4	
Xylene (Total)	**15.9**	ug/L	3.0	0.47	1		03/27/17 14:28	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/27/17 14:28	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 14:28	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO39-PZM007 **Lab ID: 30213826003** Collected: 03/21/17 11:20 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 14:28	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 14:28	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 14:28	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	104	%	78-117		1		03/27/17 14:28	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-128		1		03/27/17 14:28	17060-07-0	
Toluene-d8 (S)	103	%	59-140		1		03/27/17 14:28	2037-26-5	
Dibromofluoromethane (S)	100	%	66-132		1		03/27/17 14:28	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO39-PZM042 **Lab ID: 30213826004** Collected: 03/21/17 11:57 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 17:02	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 17:02	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:02	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:02	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 17:02	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:02	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 17:02	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 17:02	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/27/17 17:02	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 17:02	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 17:02	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 17:02	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:02	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/27/17 17:02	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/27/17 17:02	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/27/17 17:02	108-10-1	
Acetone	**50.0 U**	ug/L	50.0	17.6	5		03/27/17 17:02	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/27/17 17:02	107-13-1	
Benzene	**5720**	ug/L	500	105	500		03/27/17 17:27	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 17:02	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/27/17 17:02	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 17:02	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 17:02	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/27/17 17:02	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 17:02	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 17:02	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/27/17 17:02	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/27/17 17:02	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 17:02	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 17:02	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 17:02	74-95-3	
Ethylbenzene	**63.3**	ug/L	5.0	1.2	5		03/27/17 17:02	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/27/17 17:02	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:02	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 17:02	75-09-2	
Naphthalene	**1050**	ug/L	10.0	1.1	5		03/27/17 17:02	91-20-3	
Styrene	**97.9**	ug/L	5.0	0.85	5		03/27/17 17:02	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/27/17 17:02	127-18-4	
Toluene	**2220**	ug/L	500	105	500		03/27/17 17:27	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:02	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 17:02	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/27/17 17:02	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 17:02	75-01-4	
Xylene (Total)	**554**	ug/L	15.0	2.4	5		03/27/17 17:02	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 17:02	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 17:02	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO39-PZM042 **Lab ID: 30213826004** Collected: 03/21/17 11:57 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 17:02	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 17:02	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 17:02	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	106	%	78-117		5		03/27/17 17:02	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-128		5		03/27/17 17:02	17060-07-0	
Toluene-d8 (S)	103	%	59-140		5		03/27/17 17:02	2037-26-5	
Dibromofluoromethane (S)	99	%	66-132		5		03/27/17 17:02	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO41-PZM036 **Lab ID: 30213826005** Collected: 03/21/17 13:24 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 18:44	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 18:44	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 18:44	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 18:44	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 18:44	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 18:44	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 18:44	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 18:44	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/27/17 18:44	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 18:44	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 18:44	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 18:44	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 18:44	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/27/17 18:44	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/27/17 18:44	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/27/17 18:44	108-10-1	
Acetone	**45.8J**	ug/L	50.0	17.6	5		03/27/17 18:44	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/27/17 18:44	107-13-1	
Benzene	**102000**	ug/L	5000	1050	5000		03/27/17 19:10	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 18:44	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/27/17 18:44	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 18:44	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 18:44	74-83-9	
Carbon disulfide	**3.3J**	ug/L	5.0	1.7	5		03/27/17 18:44	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 18:44	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 18:44	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/27/17 18:44	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/27/17 18:44	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 18:44	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 18:44	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 18:44	74-95-3	
Ethylbenzene	**858**	ug/L	5.0	1.2	5		03/27/17 18:44	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/27/17 18:44	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 18:44	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 18:44	75-09-2	
Naphthalene	**322**	ug/L	10.0	1.1	5		03/27/17 18:44	91-20-3	
Styrene	**420**	ug/L	5.0	0.85	5		03/27/17 18:44	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/27/17 18:44	127-18-4	
Toluene	**57900**	ug/L	5000	1050	5000		03/27/17 19:10	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 18:44	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 18:44	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/27/17 18:44	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 18:44	75-01-4	
Xylene (Total)	**25600**	ug/L	15000	2350	5000		03/27/17 19:10	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 18:44	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 18:44	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO41-PZM036 **Lab ID: 30213826005** Collected: 03/21/17 13:24 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 18:44	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 18:44	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 18:44	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	78-117		5		03/27/17 18:44	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-128		5		03/27/17 18:44	17060-07-0	
Toluene-d8 (S)	101	%	59-140		5		03/27/17 18:44	2037-26-5	
Dibromofluoromethane (S)	92	%	66-132		5		03/27/17 18:44	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO41-PZM001 **Lab ID: 30213826006** Collected: 03/21/17 14:10 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 17:53	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 17:53	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:53	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:53	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 17:53	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:53	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 17:53	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 17:53	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/27/17 17:53	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 17:53	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 17:53	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 17:53	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:53	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/27/17 17:53	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/27/17 17:53	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/27/17 17:53	108-10-1	
Acetone	**22.7J**	ug/L	50.0	17.6	5		03/27/17 17:53	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/27/17 17:53	107-13-1	
Benzene	**20500**	ug/L	500	105	500		03/27/17 18:18	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 17:53	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/27/17 17:53	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 17:53	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 17:53	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/27/17 17:53	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 17:53	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 17:53	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/27/17 17:53	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/27/17 17:53	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 17:53	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 17:53	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 17:53	74-95-3	
Ethylbenzene	**314**	ug/L	5.0	1.2	5		03/27/17 17:53	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/27/17 17:53	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:53	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 17:53	75-09-2	
Naphthalene	**280**	ug/L	10.0	1.1	5		03/27/17 17:53	91-20-3	
Styrene	**10.8**	ug/L	5.0	0.85	5		03/27/17 17:53	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/27/17 17:53	127-18-4	
Toluene	**12700**	ug/L	500	105	500		03/27/17 18:18	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 17:53	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 17:53	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/27/17 17:53	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 17:53	75-01-4	
Xylene (Total)	**3420**	ug/L	15.0	2.4	5		03/27/17 17:53	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 17:53	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 17:53	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO41-PZM001 **Lab ID: 30213826006** Collected: 03/21/17 14:10 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 17:53	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 17:53	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 17:53	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	78-117		5		03/27/17 17:53	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-128		5		03/27/17 17:53	17060-07-0	
Toluene-d8 (S)	103	%	59-140		5		03/27/17 17:53	2037-26-5	
Dibromofluoromethane (S)	93	%	66-132		5		03/27/17 17:53	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO02-PZM006 **Lab ID: 30213826007** Collected: 03/21/17 15:10 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 19:35	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 19:35	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 19:35	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 19:35	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 19:35	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 19:35	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 19:35	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 19:35	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/27/17 19:35	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 19:35	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 19:35	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 19:35	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 19:35	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/27/17 19:35	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/27/17 19:35	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/27/17 19:35	108-10-1	
Acetone	**44.2J**	ug/L	50.0	17.6	5		03/27/17 19:35	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/27/17 19:35	107-13-1	
Benzene	**339000**	ug/L	5000	1050	5000		03/27/17 20:01	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 19:35	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/27/17 19:35	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 19:35	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 19:35	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/27/17 19:35	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 19:35	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 19:35	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/27/17 19:35	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/27/17 19:35	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 19:35	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 19:35	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 19:35	74-95-3	
Ethylbenzene	**367**	ug/L	5.0	1.2	5		03/27/17 19:35	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/27/17 19:35	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 19:35	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 19:35	75-09-2	
Naphthalene	**360**	ug/L	10.0	1.1	5		03/27/17 19:35	91-20-3	
Styrene	**7.2**	ug/L	5.0	0.85	5		03/27/17 19:35	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/27/17 19:35	127-18-4	
Toluene	**122**	ug/L	5.0	1.0	5		03/27/17 19:35	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 19:35	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 19:35	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/27/17 19:35	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 19:35	75-01-4	
Xylene (Total)	**738**	ug/L	15.0	2.4	5		03/27/17 19:35	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 19:35	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 19:35	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO02-PZM006 **Lab ID: 30213826007** Collected: 03/21/17 15:10 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 19:35	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 19:35	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 19:35	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	78-117		5		03/27/17 19:35	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-128		5		03/27/17 19:35	17060-07-0	
Toluene-d8 (S)	109	%	59-140		5		03/27/17 19:35	2037-26-5	
Dibromofluoromethane (S)	92	%	66-132		5		03/27/17 19:35	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO18-PZM006 **Lab ID: 30213826008** Collected: 03/21/17 15:47 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 20:26	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 20:26	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:26	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:26	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 20:26	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:26	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 20:26	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 20:26	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/27/17 20:26	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 20:26	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 20:26	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 20:26	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:26	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/27/17 20:26	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/27/17 20:26	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/27/17 20:26	108-10-1	
Acetone	**40.7J**	ug/L	50.0	17.6	5		03/27/17 20:26	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/27/17 20:26	107-13-1	
Benzene	**669000**	ug/L	5000	1050	5000		03/27/17 20:52	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 20:26	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/27/17 20:26	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 20:26	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 20:26	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/27/17 20:26	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 20:26	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 20:26	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/27/17 20:26	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/27/17 20:26	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 20:26	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 20:26	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 20:26	74-95-3	
Ethylbenzene	**98.8**	ug/L	5.0	1.2	5		03/27/17 20:26	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/27/17 20:26	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:26	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 20:26	75-09-2	
Naphthalene	**262**	ug/L	10.0	1.1	5		03/27/17 20:26	91-20-3	
Styrene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 20:26	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/27/17 20:26	127-18-4	
Toluene	**36500**	ug/L	5000	1050	5000		03/27/17 20:52	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:26	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 20:26	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/27/17 20:26	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 20:26	75-01-4	
Xylene (Total)	**2520**	ug/L	15.0	2.4	5		03/27/17 20:26	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 20:26	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 20:26	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: CO18-PZM006 **Lab ID: 30213826008** Collected: 03/21/17 15:47 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 20:26	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 20:26	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 20:26	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	104	%	78-117		5		03/27/17 20:26	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-128		5		03/27/17 20:26	17060-07-0	
Toluene-d8 (S)	107	%	59-140		5		03/27/17 20:26	2037-26-5	
Dibromofluoromethane (S)	94	%	66-132		5		03/27/17 20:26	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: Trip Blanks **Lab ID: 30213826009** Collected: 03/21/17 00:01 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/27/17 12:20	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 12:20	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:20	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:20	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/27/17 12:20	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 12:20	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 12:20	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 12:20	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/27/17 12:20	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 12:20	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 12:20	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 12:20	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:20	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/27/17 12:20	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/27/17 12:20	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/27/17 12:20	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/27/17 12:20	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/27/17 12:20	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:20	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/27/17 12:20	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 12:20	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 12:20	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 12:20	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/27/17 12:20	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 12:20	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 12:20	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/27/17 12:20	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/27/17 12:20	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/27/17 12:20	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 12:20	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 12:20	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 12:20	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/27/17 12:20	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:20	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/27/17 12:20	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.22	1		03/27/17 12:20	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 12:20	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/27/17 12:20	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:20	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 12:20	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/27/17 12:20	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/27/17 12:20	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/27/17 12:20	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.47	1		03/27/17 12:20	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/27/17 12:20	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 12:20	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Sample: Trip Blanks **Lab ID: 30213826009** Collected: 03/21/17 00:01 Received: 03/21/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 12:20	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 12:20	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 12:20	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	105	%	78-117		1		03/27/17 12:20	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-128		1		03/27/17 12:20	17060-07-0	
Toluene-d8 (S)	103	%	59-140		1		03/27/17 12:20	2037-26-5	
Dibromofluoromethane (S)	103	%	66-132		1		03/27/17 12:20	1868-53-7	

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

QC Batch: 253347 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30213826001, 30213826002, 30213826003, 30213826004, 30213826005, 30213826006, 30213826007, 30213826008, 30213826009

METHOD BLANK: 1247176 | Matrix: Water
Associated Lab Samples: 30213826001, 30213826002, 30213826003, 30213826004, 30213826005, 30213826006, 30213826007, 30213826008, 30213826009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.36	03/27/17 11:54	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.53	03/27/17 11:54	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.21	03/27/17 11:54	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.21	03/27/17 11:54	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.37	03/27/17 11:54	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.20	03/27/17 11:54	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.47	03/27/17 11:54	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.54	03/27/17 11:54	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.22	03/27/17 11:54	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.17	03/27/17 11:54	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.30	03/27/17 11:54	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.29	03/27/17 11:54	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	03/27/17 11:54	
2-Butanone (MEK)	ug/L	10.0 U	10.0	2.4	03/27/17 11:54	
2-Hexanone	ug/L	10.0 U	10.0	0.25	03/27/17 11:54	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.32	03/27/17 11:54	
Acetone	ug/L	10.0 U	10.0	3.5	03/27/17 11:54	
Acrylonitrile	ug/L	4.0 U	4.0	0.47	03/27/17 11:54	
Benzene	ug/L	1.0 U	1.0	0.21	03/27/17 11:54	
Bromochloromethane	ug/L	1.0 U	1.0	0.52	03/27/17 11:54	
Bromodichloromethane	ug/L	1.0 U	1.0	0.24	03/27/17 11:54	
Bromoform	ug/L	1.0 U	1.0	0.30	03/27/17 11:54	
Bromomethane	ug/L	1.0 U	1.0	0.53	03/27/17 11:54	
Carbon disulfide	ug/L	1.0 U	1.0	0.34	03/27/17 11:54	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.47	03/27/17 11:54	
Chlorobenzene	ug/L	1.0 U	1.0	0.14	03/27/17 11:54	
Chloroethane	ug/L	1.0 U	1.0	0.68	03/27/17 11:54	
Chloroform	ug/L	1.0 U	1.0	0.40	03/27/17 11:54	
Chloromethane	ug/L	1.0 U	1.0	0.51	03/27/17 11:54	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.56	03/27/17 11:54	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	03/27/17 11:54	
Dibromochloromethane	ug/L	1.0 U	1.0	0.29	03/27/17 11:54	
Dibromomethane	ug/L	1.0 U	1.0	0.47	03/27/17 11:54	
Ethylbenzene	ug/L	1.0 U	1.0	0.24	03/27/17 11:54	
Iodomethane	ug/L	50.0 U	50.0	0.62	03/27/17 11:54	
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.21	03/27/17 11:54	
Methylene Chloride	ug/L	1.0 U	1.0	0.55	03/27/17 11:54	
Naphthalene	ug/L	2.0 U	2.0	0.22	03/27/17 11:54	
Styrene	ug/L	1.0 U	1.0	0.17	03/27/17 11:54	
Tetrachloroethene	ug/L	1.0 U	1.0	0.43	03/27/17 11:54	

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

METHOD BLANK: 1247176 Matrix: Water

Associated Lab Samples: 30213826001, 30213826002, 30213826003, 30213826004, 30213826005, 30213826006, 30213826007, 30213826008, 30213826009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.21	03/27/17 11:54	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.29	03/27/17 11:54	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	03/27/17 11:54	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.54	03/27/17 11:54	
Trichloroethene	ug/L	1.0 U	1.0	0.20	03/27/17 11:54	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.31	03/27/17 11:54	
Vinyl acetate	ug/L	10.0 U	10.0	0.40	03/27/17 11:54	
Vinyl chloride	ug/L	1.0 U	1.0	0.33	03/27/17 11:54	
Xylene (Total)	ug/L	3.0 U	3.0	0.47	03/27/17 11:54	
1,2-Dichloroethane-d4 (S)	%	103	70-128		03/27/17 11:54	
4-Bromofluorobenzene (S)	%	106	78-117		03/27/17 11:54	
Dibromofluoromethane (S)	%	103	66-132		03/27/17 11:54	
Toluene-d8 (S)	%	102	59-140		03/27/17 11:54	

LABORATORY CONTROL SAMPLE: 1247177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.8	94	72-118	
1,1,1-Trichloroethane	ug/L	20	22.2	111	79-125	
1,1,2,2-Tetrachloroethane	ug/L	20	21.4	107	64-130	
1,1,2-Trichloroethane	ug/L	20	20.7	104	78-118	
1,1-Dichloroethane	ug/L	20	21.8	109	77-124	
1,1-Dichloroethene	ug/L	20	20.2	101	74-127	
1,2,3-Trichloropropane	ug/L	20	20.2	101	70-123	
1,2-Dibromo-3-chloropropane	ug/L	20	20.0	100	53-133	
1,2-Dibromoethane (EDB)	ug/L	20	18.8	94	69-126	
1,2-Dichlorobenzene	ug/L	20	23.1	115	83-117	
1,2-Dichloroethane	ug/L	20	20.3	101	73-118	
1,2-Dichloropropane	ug/L	20	22.3	112	77-126	
1,4-Dichlorobenzene	ug/L	20	21.2	106	83-119	
2-Butanone (MEK)	ug/L	20	19.1	95	55-134	
2-Hexanone	ug/L	20	22.5	113	78-156	
4-Methyl-2-pentanone (MIBK)	ug/L	20	18.2	91	63-121	
Acetone	ug/L	20	19.0	95	51-144	
Acrylonitrile	ug/L	20	25.6	128	39-170	
Benzene	ug/L	20	20.6	103	80-113	
Bromochloromethane	ug/L	20	19.3	97	78-114	
Bromodichloromethane	ug/L	20	23.5	117	78-121	
Bromoform	ug/L	20	22.3	111	71-130	
Bromomethane	ug/L	20	21.7	108	58-154	
Carbon disulfide	ug/L	20	18.4	92	66-152	
Carbon tetrachloride	ug/L	20	23.9	119	69-133	
Chlorobenzene	ug/L	20	21.3	107	85-116	

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

LABORATORY CONTROL SAMPLE: 1247177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	20.0	100	76-136	
Chloroform	ug/L	20	20.6	103	76-118	
Chloromethane	ug/L	20	21.6	108	67-148	
cis-1,2-Dichloroethene	ug/L	20	21.4	107	77-126	
cis-1,3-Dichloropropene	ug/L	20	22.2	111	75-119	
Dibromochloromethane	ug/L	20	21.1	105	66-131	
Dibromomethane	ug/L	20	20.7	103	76-121	
Ethylbenzene	ug/L	20	20.2	101	80-115	
Iodomethane	ug/L	20	15.6J	78	10-149	
Methyl-tert-butyl ether	ug/L	20	18.2	91	82-126	
Methylene Chloride	ug/L	20	23.0	115	61-142	
Naphthalene	ug/L	20	20.6	103	61-139	
Styrene	ug/L	20	20.7	104	84-120	
Tetrachloroethene	ug/L	20	20.5	103	82-120	
Toluene	ug/L	20	20.0	100	82-116	
trans-1,2-Dichloroethene	ug/L	20	21.0	105	76-125	
trans-1,3-Dichloropropene	ug/L	20	21.5	107	73-119	
trans-1,4-Dichloro-2-butene	ug/L	20	17.1	85	27-116	
Trichloroethene	ug/L	20	20.2	101	84-116	
Trichlorofluoromethane	ug/L	20	18.6	93	59-138	
Vinyl acetate	ug/L	20	24.4	122	10-175	
Vinyl chloride	ug/L	20	19.4	97	63-133	
Xylene (Total)	ug/L	60	60.5	101	82-115	
1,2-Dichloroethane-d4 (S)	%			98	70-128	
4-Bromofluorobenzene (S)	%			102	78-117	
Dibromofluoromethane (S)	%			100	66-132	
Toluene-d8 (S)	%			101	59-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1247381 1247382

Parameter	Units	30213893009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	14.8	16.7	74	84	52-120	12	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	16.8	19.0	84	95	54-140	12	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.0	19.1	90	95	54-124	6	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.0	19.9	90	100	58-120	10	30	
1,1-Dichloroethane	ug/L	ND	20	20	16.2	18.1	81	91	55-133	11	30	
1,1-Dichloroethene	ug/L	ND	20	20	14.5	16.3	72	81	48-141	12	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	18.1	19.3	90	97	51-116	7	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	18.0	18.4	90	92	23-126	2	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	17.4	18.8	87	94	58-115	8	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	16.4	18.7	82	94	57-124	13	30	
1,2-Dichloroethane	ug/L	ND	20	20	17.7	19.5	88	97	58-123	10	30	
1,2-Dichloropropane	ug/L	ND	20	20	17.2	19.2	86	96	55-125	11	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1247381 1247382

Parameter	Units	30213893009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	ND	20	20	15.1	17.2	76	86	61-111	13	30	
2-Butanone (MEK)	ug/L	ND	20	20	21.1	19.4	105	97	43-128	8	30	
2-Hexanone	ug/L	ND	20	20	27.8	26.5	139	133	43-135	5	30	MH
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	21.9	19.4	109	97	47-123	12	30	
Acetone	ug/L	ND	20	20	23.2	27.2	116	136	10-150	16	30	
Acrylonitrile	ug/L	ND	20	20	31.5	27.4	157	137	31-182	14	30	
Benzene	ug/L	ND	20	20	17.2	18.4	86	92	63-123	7	30	
Bromochloromethane	ug/L	ND	20	20	16.8	18.3	84	92	42-149	9	30	
Bromodichloromethane	ug/L	ND	20	20	17.9	20.1	90	100	55-127	11	30	
Bromoform	ug/L	ND	20	20	18.3	19.2	92	96	44-131	5	30	
Bromomethane	ug/L	ND	20	20	19.4	19.3	97	97	10-149	0	30	
Carbon disulfide	ug/L	ND	20	20	21.3	16.0	107	80	47-158	29	30	
Carbon tetrachloride	ug/L	ND	20	20	17.8	19.9	89	99	44-155	11	30	
Chlorobenzene	ug/L	ND	20	20	16.6	18.7	83	94	57-121	12	30	
Chloroethane	ug/L	ND	20	20	22.0	18.7	110	93	57-156	16	30	
Chloroform	ug/L	ND	20	20	14.9	17.7	74	88	56-132	17	30	
Chloromethane	ug/L	ND	20	20	21.9	18.3	109	91	42-163	18	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	16.0	18.5	80	92	46-139	14	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	16.6	18.4	83	92	55-119	10	30	
Dibromochloromethane	ug/L	ND	20	20	18.2	20.0	91	100	52-129	9	30	
Dibromomethane	ug/L	ND	20	20	19.2	21.1	96	106	52-120	10	30	
Ethylbenzene	ug/L	ND	20	20	14.7	16.6	73	83	70-120	13	30	
Iodomethane	ug/L	ND	20	20	15.8J	13.8J	79	69	10-177		30	
Methyl-tert-butyl ether	ug/L	ND	20	20	20.1	17.2	100	86	63-143	16	30	
Methylene Chloride	ug/L	ND	20	20	18.3	20.0	92	100	38-134	9	30	
Naphthalene	ug/L	ND	20	20	15.6	17.8	78	89	55-122	13	30	
Styrene	ug/L	ND	20	20	15.4	17.9	77	90	49-135	15	30	
Tetrachloroethene	ug/L	ND	20	20	15.5	18.0	78	90	53-125	15	30	
Toluene	ug/L	ND	20	20	15.3	17.1	77	85	66-124	11	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	15.8	17.9	79	90	52-136	13	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.7	19.0	84	95	54-118	13	30	
trans-1,4-Dichloro-2-butene	ug/L	ND	20	20	15.3	13.1	76	65	19-116	16	30	
Trichloroethene	ug/L	ND	20	20	15.2	17.7	76	89	50-127	15	30	
Trichlorofluoromethane	ug/L	ND	20	20	21.8	18.2	109	91	63-167	18	30	
Vinyl acetate	ug/L	ND	20	20	22.4	22.0	112	110	10-49	2	30	MH
Vinyl chloride	ug/L	ND	20	20	20.8	17.7	104	89	54-149	16	30	
Xylene (Total)	ug/L	ND	60	60	44.0	50.8	73	85	68-123	14	30	
1,2-Dichloroethane-d4 (S)	%						101	102	70-128			
4-Bromofluorobenzene (S)	%						105	102	78-117			
Dibromofluoromethane (S)	%						102	103	66-132			
Toluene-d8 (S)	%						102	104	59-140			

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.

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(724)850-5600

QUALIFIERS

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

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.

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA 1st Quarter 2017
Pace Project No.: 30213826

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30213826001	**CO42-PZM004**	EPA 8260B	253347		
30213826002	**CO40-PZM008**	EPA 8260B	253347		
30213826003	**CO39-PZM007**	EPA 8260B	253347		
30213826004	**CO39-PZM042**	EPA 8260B	253347		
30213826005	**CO41-PZM036**	EPA 8260B	253347		
30213826006	**CO41-PZM001**	EPA 8260B	253347		
30213826007	**CO02-PZM006**	EPA 8260B	253347		
30213826008	**CO18-PZM006**	EPA 8260B	253347		
30213826009	**Trip Blanks**	EPA 8260B	253347		

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

30213826

Section A
Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone: 314-620-3056	Fax:
Requested Due Date/TAT:	

Section B
Required Project Information:

Report To:	James Calenda
Copy To:	
Purchase Order No.:	EAG-SPT-6034
Project Name:	COA 1st Quarter 2017
Project Number:	

Section C
Invoice Information:

Attention:	Laura Sargent
Company Name:	Enviro Analytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

WO#:30213826

ITEM #	SAMPLE ID	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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: VOC + Napthalene 8260	Resid	Pace Project No./ Lab I.D.
1	CO42-PZM004	WT	G			3/21/17	947		3				X					X		001
2	CO40-PZM008	WT	G			3/21/17	1036		3				X					X		002
3	CO39-PZM007	WT	G			3/21/17	1120		3				X					X		003
4	CO39-PZM042	WT	G			3/21/17	1157		3				X					X		004
5	CO41-PZM036	WT	G			3/21/17	1324		3				X					X		005
6	CO41-PZM001	WT	G			3/21/17	1410		3				X					X		006
7	CO02-PZM006	WT	G			3/21/17	1510		3				X					X		007
8	CO18-PZM006	WT	G			3/21/17	1547		3				X					X		008
9																				TB 009
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
No Data Package Needed	[signature] EAG	3/21/17	1655	David L Hallagan Pace	3/21/17	1655
	David L Hallagan Pace	3/21/17	2025	R Big Pace	3/21/17	2025
	R Big Pace	3/21/17	2330	R Big Pace	3/21/17	2330

SAMPLE CONDITIONS	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	2.9	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeff Wilson

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 3/21/17

*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.

F-ALL-Q-020rev.06, 2-Feb-2007

Sample Condition Upon Receipt Pittsburgh

30213826

Pace Analytical

Client Name: EnviroAnalytics Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 6 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.9 °C Correction Factor: +0.0 °C Final Temp: 2.9 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: RTB 3/21/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5. Labels are on bags containing the vials.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.			X	15.
All containers needing preservation are found to be in compliance with EPA recommendation.			X	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed 3/21/17 RTB; Date/time of preservation; Lot # of added preservative
Headspace in VOA Vials (>6mm):		X		16.
Trip Blank Present:	X			17. 2 x V69H provided by Pace as TBs.
Trip Blank Custody Seals Present	X		X RTB 3/21/17	
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed: Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 04, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
Sparrows Point Terminal
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Dear Mr. Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on March 20, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project:	COA 1st Quarter 2017
Pace Project No.:	30213733

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30213733001	**CO36-PZM008**	Water	03/20/17 10:43	03/20/17 21:30
30213733002	**CO36-PZM043**	Water	03/20/17 11:24	03/20/17 21:30
30213733003	**CO38-PZM006**	Water	03/20/17 12:46	03/20/17 21:30
30213733004	**CO38-PZM043**	Water	03/20/17 13:15	03/20/17 21:30
30213733005	**CO27-PZM046**	Water	03/20/17 14:01	03/20/17 21:30
30213733006	**CO27-PZM012**	Water	03/20/17 14:36	03/20/17 21:30
30213733007	**CO37-PZM038**	Water	03/20/17 15:25	03/20/17 21:30
30213733008	**TRIP BLANKS**	Water	03/20/17 00:01	03/20/17 21:30

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SAMPLE ANALYTE COUNT

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30213733001	**CO36-PZM008**	EPA 8260B	LEL	53	PASI-PA
30213733002	**CO36-PZM043**	EPA 8260B	LEL	53	PASI-PA
30213733003	**CO38-PZM006**	EPA 8260B	LEL	53	PASI-PA
30213733004	**CO38-PZM043**	EPA 8260B	LEL	53	PASI-PA
30213733005	**CO27-PZM046**	EPA 8260B	LEL	53	PASI-PA
30213733006	**CO27-PZM012**	EPA 8260B	LEL	53	PASI-PA
30213733007	**CO37-PZM038**	EPA 8260B	LEL	53	PASI-PA
30213733008	**TRIP BLANKS**	EPA 8260B	LEL	53	PASI-PA

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO36-PZM008 **Lab ID: 30213733001** Collected: 03/20/17 10:43 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 17:41	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:41	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:41	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:41	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 17:41	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:41	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 17:41	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 17:41	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/23/17 17:41	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 17:41	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 17:41	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 17:41	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:41	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/23/17 17:41	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/23/17 17:41	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/23/17 17:41	108-10-1	
Acetone	**50.0 U**	ug/L	50.0	17.6	5		03/23/17 17:41	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/23/17 17:41	107-13-1	
Benzene	**21300**	ug/L	500	105	500		03/23/17 18:07	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:41	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/23/17 17:41	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 17:41	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:41	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/23/17 17:41	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 17:41	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 17:41	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/23/17 17:41	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/23/17 17:41	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 17:41	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 17:41	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 17:41	74-95-3	
Ethylbenzene	**54.3**	ug/L	5.0	1.2	5		03/23/17 17:41	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/23/17 17:41	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:41	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 17:41	75-09-2	
Naphthalene	**723**	ug/L	10.0	1.1	5		03/23/17 17:41	91-20-3	
Styrene	**15.4**	ug/L	5.0	0.85	5		03/23/17 17:41	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/23/17 17:41	127-18-4	
Toluene	**4610**	ug/L	500	105	500		03/23/17 18:07	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 17:41	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 17:41	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/23/17 17:41	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 17:41	75-01-4	
Xylene (Total)	**1370**	ug/L	15.0	2.4	5		03/23/17 17:41	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 17:41	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 17:41	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO36-PZM008 **Lab ID: 30213733001** Collected: 03/20/17 10:43 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 17:41	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 17:41	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 17:41	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	104	%	78-117		5		03/23/17 17:41	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-128		5		03/23/17 17:41	17060-07-0	
Toluene-d8 (S)	101	%	59-140		5		03/23/17 17:41	2037-26-5	
Dibromofluoromethane (S)	97	%	66-132		5		03/23/17 17:41	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO36-PZM043 **Lab ID: 30213733002** Collected: 03/20/17 11:24 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 18:32	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 18:32	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:32	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:32	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 18:32	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:32	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 18:32	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 18:32	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/23/17 18:32	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 18:32	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 18:32	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 18:32	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:32	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/23/17 18:32	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/23/17 18:32	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/23/17 18:32	108-10-1	
Acetone	**50.0 U**	ug/L	50.0	17.6	5		03/23/17 18:32	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/23/17 18:32	107-13-1	
Benzene	**15400**	ug/L	500	105	500		03/23/17 18:58	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 18:32	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/23/17 18:32	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 18:32	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 18:32	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/23/17 18:32	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 18:32	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 18:32	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/23/17 18:32	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/23/17 18:32	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 18:32	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 18:32	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 18:32	74-95-3	
Ethylbenzene	**101**	ug/L	5.0	1.2	5		03/23/17 18:32	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/23/17 18:32	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:32	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 18:32	75-09-2	
Naphthalene	**7980**	ug/L	1000	110	500		03/23/17 18:58	91-20-3	
Styrene	**95.6**	ug/L	5.0	0.85	5		03/23/17 18:32	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/23/17 18:32	127-18-4	
Toluene	**1690**	ug/L	5.0	1.0	5		03/23/17 18:32	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 18:32	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 18:32	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/23/17 18:32	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 18:32	75-01-4	
Xylene (Total)	**836**	ug/L	15.0	2.4	5		03/23/17 18:32	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 18:32	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 18:32	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO36-PZM043 **Lab ID: 30213733002** Collected: 03/20/17 11:24 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 18:32	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 18:32	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 18:32	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	104	%	78-117		5		03/23/17 18:32	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-128		5		03/23/17 18:32	17060-07-0	
Toluene-d8 (S)	102	%	59-140		5		03/23/17 18:32	2037-26-5	
Dibromofluoromethane (S)	99	%	66-132		5		03/23/17 18:32	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO38-PZM006 **Lab ID: 30213733003** Collected: 03/20/17 12:46 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/23/17 15:59	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 15:59	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:59	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:59	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/23/17 15:59	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 15:59	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:59	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 15:59	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/23/17 15:59	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:59	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 15:59	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:59	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:59	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/23/17 15:59	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/23/17 15:59	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/23/17 15:59	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/23/17 15:59	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/23/17 15:59	107-13-1	
Benzene	**10700**	ug/L	100	21.0	100		03/23/17 16:24	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/23/17 15:59	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 15:59	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 15:59	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 15:59	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/23/17 15:59	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:59	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 15:59	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/23/17 15:59	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/23/17 15:59	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/23/17 15:59	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:59	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:59	74-95-3	
Ethylbenzene	**269**	ug/L	1.0	0.24	1		03/23/17 15:59	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/23/17 15:59	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:59	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/23/17 15:59	75-09-2	
Naphthalene	**6620**	ug/L	200	22.0	100		03/23/17 16:24	91-20-3	
Styrene	**340**	ug/L	100	17.0	100		03/23/17 16:24	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/23/17 15:59	127-18-4	
Toluene	**7210**	ug/L	100	21.0	100		03/23/17 16:24	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 15:59	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/23/17 15:59	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/23/17 15:59	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/23/17 15:59	75-01-4	
Xylene (Total)	**2120**	ug/L	300	47.0	100		03/23/17 16:24	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/23/17 15:59	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 15:59	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO38-PZM006 **Lab ID: 30213733003** Collected: 03/20/17 12:46 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:59	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:59	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 15:59	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	78-117		1		03/23/17 15:59	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-128		1		03/23/17 15:59	17060-07-0	
Toluene-d8 (S)	98	%	59-140		1		03/23/17 15:59	2037-26-5	
Dibromofluoromethane (S)	96	%	66-132		1		03/23/17 15:59	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO38-PZM043 **Lab ID: 30213733004** Collected: 03/20/17 13:15 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/23/17 15:33	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 15:33	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:33	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:33	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/23/17 15:33	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 15:33	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:33	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 15:33	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/23/17 15:33	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:33	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 15:33	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:33	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:33	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/23/17 15:33	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/23/17 15:33	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/23/17 15:33	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/23/17 15:33	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/23/17 15:33	107-13-1	
Benzene	**1.4**	ug/L	1.0	0.21	1		03/23/17 15:33	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/23/17 15:33	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 15:33	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 15:33	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 15:33	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/23/17 15:33	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:33	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 15:33	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/23/17 15:33	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/23/17 15:33	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/23/17 15:33	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:33	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 15:33	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 15:33	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/23/17 15:33	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:33	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/23/17 15:33	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.22	1		03/23/17 15:33	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:33	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/23/17 15:33	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 15:33	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 15:33	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/23/17 15:33	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/23/17 15:33	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/23/17 15:33	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.47	1		03/23/17 15:33	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/23/17 15:33	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 15:33	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO38-PZM043 **Lab ID: 30213733004** Collected: 03/20/17 13:15 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 15:33	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 15:33	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 15:33	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	78-117		1		03/23/17 15:33	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-128		1		03/23/17 15:33	17060-07-0	
Toluene-d8 (S)	97	%	59-140		1		03/23/17 15:33	2037-26-5	
Dibromofluoromethane (S)	106	%	66-132		1		03/23/17 15:33	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO27-PZM046 **Lab ID: 30213733005** Collected: 03/20/17 14:01 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 20:15	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 20:15	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 20:15	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 20:15	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 20:15	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 20:15	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 20:15	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 20:15	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/23/17 20:15	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 20:15	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 20:15	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 20:15	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 20:15	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/23/17 20:15	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/23/17 20:15	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/23/17 20:15	108-10-1	
Acetone	**50.0 U**	ug/L	50.0	17.6	5		03/23/17 20:15	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/23/17 20:15	107-13-1	
Benzene	**55600**	ug/L	5000	1050	5000		03/23/17 20:40	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 20:15	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/23/17 20:15	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 20:15	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 20:15	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/23/17 20:15	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 20:15	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 20:15	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/23/17 20:15	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/23/17 20:15	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 20:15	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 20:15	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 20:15	74-95-3	
Ethylbenzene	**35.4**	ug/L	5.0	1.2	5		03/23/17 20:15	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/23/17 20:15	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 20:15	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 20:15	75-09-2	
Naphthalene	**1170**	ug/L	10.0	1.1	5		03/23/17 20:15	91-20-3	
Styrene	**7.8**	ug/L	5.0	0.85	5		03/23/17 20:15	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/23/17 20:15	127-18-4	
Toluene	**6920**	ug/L	5000	1050	5000		03/23/17 20:40	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 20:15	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 20:15	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/23/17 20:15	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 20:15	75-01-4	
Xylene (Total)	**617**	ug/L	15.0	2.4	5		03/23/17 20:15	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 20:15	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 20:15	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO27-PZM046 **Lab ID: 30213733005** Collected: 03/20/17 14:01 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 20:15	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 20:15	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 20:15	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	107	%	78-117		5		03/23/17 20:15	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-128		5		03/23/17 20:15	17060-07-0	
Toluene-d8 (S)	104	%	59-140		5		03/23/17 20:15	2037-26-5	
Dibromofluoromethane (S)	92	%	66-132		5		03/23/17 20:15	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO27-PZM012 **Lab ID: 30213733006** Collected: 03/20/17 14:36 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/23/17 16:50	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 16:50	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 16:50	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 16:50	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/23/17 16:50	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 16:50	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 16:50	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 16:50	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/23/17 16:50	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 16:50	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 16:50	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 16:50	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 16:50	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/23/17 16:50	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/23/17 16:50	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/23/17 16:50	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/23/17 16:50	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/23/17 16:50	107-13-1	
Benzene	**16100**	ug/L	100	21.0	100		03/23/17 17:16	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/23/17 16:50	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 16:50	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 16:50	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 16:50	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/23/17 16:50	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 16:50	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 16:50	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/23/17 16:50	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/23/17 16:50	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/23/17 16:50	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 16:50	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 16:50	74-95-3	
Ethylbenzene	**171**	ug/L	1.0	0.24	1		03/23/17 16:50	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/23/17 16:50	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 16:50	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/23/17 16:50	75-09-2	
Naphthalene	**5670**	ug/L	200	22.0	100		03/23/17 17:16	91-20-3	
Styrene	**213**	ug/L	1.0	0.17	1		03/23/17 16:50	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/23/17 16:50	127-18-4	
Toluene	**5390**	ug/L	100	21.0	100		03/23/17 17:16	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 16:50	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/23/17 16:50	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/23/17 16:50	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/23/17 16:50	75-01-4	
Xylene (Total)	**1500**	ug/L	300	47.0	100		03/23/17 17:16	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/23/17 16:50	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 16:50	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO27-PZM012 **Lab ID: 30213733006** Collected: 03/20/17 14:36 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 16:50	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 16:50	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 16:50	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	78-117		1		03/23/17 16:50	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-128		1		03/23/17 16:50	17060-07-0	
Toluene-d8 (S)	101	%	59-140		1		03/23/17 16:50	2037-26-5	
Dibromofluoromethane (S)	95	%	66-132		1		03/23/17 16:50	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO37-PZM038 **Lab ID: 30213733007** Collected: 03/20/17 15:25 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 19:24	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 19:24	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:24	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:24	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/23/17 19:24	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:24	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 19:24	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 19:24	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/23/17 19:24	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 19:24	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 19:24	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 19:24	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:24	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/23/17 19:24	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/23/17 19:24	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/23/17 19:24	108-10-1	
Acetone	**32.0J**	ug/L	50.0	17.6	5		03/23/17 19:24	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/23/17 19:24	107-13-1	
Benzene	**69400**	ug/L	500	105	500		03/23/17 19:49	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 19:24	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/23/17 19:24	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/23/17 19:24	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 19:24	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/23/17 19:24	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 19:24	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 19:24	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/23/17 19:24	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/23/17 19:24	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/23/17 19:24	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 19:24	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/23/17 19:24	74-95-3	
Ethylbenzene	**244**	ug/L	5.0	1.2	5		03/23/17 19:24	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/23/17 19:24	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:24	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 19:24	75-09-2	
Naphthalene	**1280**	ug/L	10.0	1.1	5		03/23/17 19:24	91-20-3	
Styrene	**12.2**	ug/L	5.0	0.85	5		03/23/17 19:24	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/23/17 19:24	127-18-4	
Toluene	**6180**	ug/L	500	105	500		03/23/17 19:49	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/23/17 19:24	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 19:24	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/23/17 19:24	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/23/17 19:24	75-01-4	
Xylene (Total)	**2230**	ug/L	15.0	2.4	5		03/23/17 19:24	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/23/17 19:24	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/23/17 19:24	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: CO37-PZM038 **Lab ID: 30213733007** Collected: 03/20/17 15:25 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/23/17 19:24	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/23/17 19:24	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/23/17 19:24	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	78-117		5		03/23/17 19:24	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-128		5		03/23/17 19:24	17060-07-0	
Toluene-d8 (S)	101	%	59-140		5		03/23/17 19:24	2037-26-5	
Dibromofluoromethane (S)	95	%	66-132		5		03/23/17 19:24	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: TRIP BLANKS **Lab ID: 30213733008** Collected: 03/20/17 00:01 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/23/17 12:34	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 12:34	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:34	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:34	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/23/17 12:34	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 12:34	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 12:34	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 12:34	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/23/17 12:34	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 12:34	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 12:34	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 12:34	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:34	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/23/17 12:34	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/23/17 12:34	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/23/17 12:34	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/23/17 12:34	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/23/17 12:34	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:34	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/23/17 12:34	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 12:34	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/23/17 12:34	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/23/17 12:34	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/23/17 12:34	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 12:34	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 12:34	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/23/17 12:34	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/23/17 12:34	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/23/17 12:34	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 12:34	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/23/17 12:34	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.24	1		03/23/17 12:34	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/23/17 12:34	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:34	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/23/17 12:34	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.22	1		03/23/17 12:34	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 12:34	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/23/17 12:34	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.21	1		03/23/17 12:34	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/23/17 12:34	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/23/17 12:34	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/23/17 12:34	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/23/17 12:34	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.47	1		03/23/17 12:34	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/23/17 12:34	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/23/17 12:34	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Sample: TRIP BLANKS **Lab ID: 30213733008** Collected: 03/20/17 00:01 Received: 03/20/17 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/23/17 12:34	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/23/17 12:34	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/23/17 12:34	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	78-117		1		03/23/17 12:34	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-128		1		03/23/17 12:34	17060-07-0	
Toluene-d8 (S)	100	%	59-140		1		03/23/17 12:34	2037-26-5	
Dibromofluoromethane (S)	103	%	66-132		1		03/23/17 12:34	1868-53-7	

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

QC Batch: 253061 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30213733001, 30213733002, 30213733003, 30213733004, 30213733005, 30213733006, 30213733007, 30213733008

METHOD BLANK: 1245021 | Matrix: Water
Associated Lab Samples: 30213733001, 30213733002, 30213733003, 30213733004, 30213733005, 30213733006, 30213733007, 30213733008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.36	03/23/17 12:09	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.53	03/23/17 12:09	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.21	03/23/17 12:09	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.21	03/23/17 12:09	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.37	03/23/17 12:09	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.20	03/23/17 12:09	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.47	03/23/17 12:09	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.54	03/23/17 12:09	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.22	03/23/17 12:09	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.17	03/23/17 12:09	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.30	03/23/17 12:09	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.29	03/23/17 12:09	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	03/23/17 12:09	
2-Butanone (MEK)	ug/L	10.0 U	10.0	2.4	03/23/17 12:09	
2-Hexanone	ug/L	10.0 U	10.0	0.25	03/23/17 12:09	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.32	03/23/17 12:09	
Acetone	ug/L	10.0 U	10.0	3.5	03/23/17 12:09	
Acrylonitrile	ug/L	4.0 U	4.0	0.47	03/23/17 12:09	
Benzene	ug/L	1.0 U	1.0	0.21	03/23/17 12:09	
Bromochloromethane	ug/L	1.0 U	1.0	0.52	03/23/17 12:09	
Bromodichloromethane	ug/L	1.0 U	1.0	0.24	03/23/17 12:09	
Bromoform	ug/L	1.0 U	1.0	0.30	03/23/17 12:09	
Bromomethane	ug/L	1.0 U	1.0	0.53	03/23/17 12:09	
Carbon disulfide	ug/L	1.0 U	1.0	0.34	03/23/17 12:09	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.47	03/23/17 12:09	
Chlorobenzene	ug/L	1.0 U	1.0	0.14	03/23/17 12:09	
Chloroethane	ug/L	1.0 U	1.0	0.68	03/23/17 12:09	
Chloroform	ug/L	1.0 U	1.0	0.40	03/23/17 12:09	
Chloromethane	ug/L	1.0 U	1.0	0.51	03/23/17 12:09	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.56	03/23/17 12:09	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	03/23/17 12:09	
Dibromochloromethane	ug/L	1.0 U	1.0	0.29	03/23/17 12:09	
Dibromomethane	ug/L	1.0 U	1.0	0.47	03/23/17 12:09	
Ethylbenzene	ug/L	1.0 U	1.0	0.24	03/23/17 12:09	
Iodomethane	ug/L	50.0 U	50.0	0.62	03/23/17 12:09	
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.21	03/23/17 12:09	
Methylene Chloride	ug/L	1.0 U	1.0	0.55	03/23/17 12:09	
Naphthalene	ug/L	2.0 U	2.0	0.22	03/23/17 12:09	
Styrene	ug/L	1.0 U	1.0	0.17	03/23/17 12:09	
Tetrachloroethene	ug/L	1.0 U	1.0	0.43	03/23/17 12:09	

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

METHOD BLANK: 1245021 Matrix: Water

Associated Lab Samples: 30213733001, 30213733002, 30213733003, 30213733004, 30213733005, 30213733006, 30213733007, 30213733008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.21	03/23/17 12:09	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.29	03/23/17 12:09	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	03/23/17 12:09	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.54	03/23/17 12:09	
Trichloroethene	ug/L	1.0 U	1.0	0.20	03/23/17 12:09	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.31	03/23/17 12:09	
Vinyl acetate	ug/L	10.0 U	10.0	0.40	03/23/17 12:09	
Vinyl chloride	ug/L	1.0 U	1.0	0.33	03/23/17 12:09	
Xylene (Total)	ug/L	3.0 U	3.0	0.47	03/23/17 12:09	
1,2-Dichloroethane-d4 (S)	%	103	70-128		03/23/17 12:09	
4-Bromofluorobenzene (S)	%	104	78-117		03/23/17 12:09	
Dibromofluoromethane (S)	%	101	66-132		03/23/17 12:09	
Toluene-d8 (S)	%	98	59-140		03/23/17 12:09	

LABORATORY CONTROL SAMPLE: 1245022

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.3	101	72-118	
1,1,1-Trichloroethane	ug/L	20	20.3	101	79-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	64-130	
1,1,2-Trichloroethane	ug/L	20	20.7	104	78-118	
1,1-Dichloroethane	ug/L	20	21.0	105	77-124	
1,1-Dichloroethene	ug/L	20	19.0	95	74-127	
1,2,3-Trichloropropane	ug/L	20	19.3	97	70-123	
1,2-Dibromo-3-chloropropane	ug/L	20	18.8	94	53-133	
1,2-Dibromoethane (EDB)	ug/L	20	20.1	100	69-126	
1,2-Dichlorobenzene	ug/L	20	19.4	97	83-117	
1,2-Dichloroethane	ug/L	20	20.3	101	73-118	
1,2-Dichloropropane	ug/L	20	21.4	107	77-126	
1,4-Dichlorobenzene	ug/L	20	19.6	98	83-119	
2-Butanone (MEK)	ug/L	20	18.2	91	55-134	
2-Hexanone	ug/L	20	24.3	121	78-156	
4-Methyl-2-pentanone (MIBK)	ug/L	20	18.1	90	63-121	
Acetone	ug/L	20	24.3	121	51-144	
Acrylonitrile	ug/L	20	26.2	131	39-170	
Benzene	ug/L	20	19.6	98	80-113	
Bromochloromethane	ug/L	20	19.4	97	78-114	
Bromodichloromethane	ug/L	20	21.3	106	78-121	
Bromoform	ug/L	20	20.1	100	71-130	
Bromomethane	ug/L	20	22.0	110	58-154	
Carbon disulfide	ug/L	20	20.9	105	66-152	
Carbon tetrachloride	ug/L	20	21.5	107	69-133	
Chlorobenzene	ug/L	20	21.2	106	85-116	

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

LABORATORY CONTROL SAMPLE: 1245022

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	19.4	97	76-136	
Chloroform	ug/L	20	20.2	101	76-118	
Chloromethane	ug/L	20	21.3	106	67-148	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	77-126	
cis-1,3-Dichloropropene	ug/L	20	21.9	110	75-119	
Dibromochloromethane	ug/L	20	21.5	108	66-131	
Dibromomethane	ug/L	20	20.9	104	76-121	
Ethylbenzene	ug/L	20	19.4	97	80-115	
Iodomethane	ug/L	20	13.7J	69	10-149	
Methyl-tert-butyl ether	ug/L	20	18.7	94	82-126	
Methylene Chloride	ug/L	20	21.6	108	61-142	
Naphthalene	ug/L	20	20.4	102	61-139	
Styrene	ug/L	20	20.0	100	84-120	
Tetrachloroethene	ug/L	20	20.8	104	82-120	
Toluene	ug/L	20	19.5	97	82-116	
trans-1,2-Dichloroethene	ug/L	20	19.9	100	76-125	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	73-119	
trans-1,4-Dichloro-2-butene	ug/L	20	16.0	80	27-116	
Trichloroethene	ug/L	20	20.3	102	84-116	
Trichlorofluoromethane	ug/L	20	20.9	105	59-138	
Vinyl acetate	ug/L	20	24.1	120	10-175	
Vinyl chloride	ug/L	20	19.8	99	63-133	
Xylene (Total)	ug/L	60	59.3	99	82-115	
1,2-Dichloroethane-d4 (S)	%			102	70-128	
4-Bromofluorobenzene (S)	%			99	78-117	
Dibromofluoromethane (S)	%			106	66-132	
Toluene-d8 (S)	%			102	59-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1245297 1245298

Parameter	Units	30213908004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	19.2	16.0	96	80	52-120	18	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	20.9	17.5	105	88	54-140	18	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.3	17.1	96	85	54-124	12	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.1	17.9	95	89	58-120	7	30	
1,1-Dichloroethane	ug/L	ND	20	20	20.9	17.9	105	89	55-133	16	30	
1,1-Dichloroethene	ug/L	ND	20	20	19.3	16.5	96	83	48-141	15	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	19.2	17.3	96	87	51-116	10	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	19.3	18.7	96	94	23-126	3	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	18.8	16.7	94	84	58-115	11	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	18.4	16.2	92	81	57-124	12	30	
1,2-Dichloroethane	ug/L	ND	20	20	20.0	17.9	100	90	58-123	11	30	
1,2-Dichloropropane	ug/L	ND	20	20	21.0	18.2	105	91	55-125	14	30	

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

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1245297 1245298

Parameter	Units	30213908004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	ND	20	20	19.5	17.0	97	85	61-111	14	30	
2-Butanone (MEK)	ug/L	ND	20	20	20.2	21.5	101	107	43-128	6	30	
2-Hexanone	ug/L	ND	20	20	25.0	26.4	125	132	43-135	5	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	18.2	19.6	91	98	47-123	8	30	
Acetone	ug/L	ND	20	20	19.5	21.8	98	109	10-150	11	30	
Acrylonitrile	ug/L	ND	20	20	24.0	25.5	120	128	31-182	6	30	
Benzene	ug/L	ND	20	20	20.0	17.0	100	85	63-123	16	30	
Bromochloromethane	ug/L	ND	20	20	18.6	16.2	93	81	42-149	14	30	
Bromodichloromethane	ug/L	ND	20	20	19.9	18.0	99	90	55-127	10	30	
Bromoform	ug/L	ND	20	20	18.6	16.9	93	85	44-131	10	30	
Bromomethane	ug/L	ND	20	20	9.9	12.0	49	60	10-149	19	30	
Carbon disulfide	ug/L	ND	20	20	21.3	21.6	106	108	47-158	1	30	
Carbon tetrachloride	ug/L	ND	20	20	18.1	15.2	91	76	44-155	18	30	
Chlorobenzene	ug/L	ND	20	20	20.4	17.7	102	88	57-121	14	30	
Chloroethane	ug/L	ND	20	20	21.3	19.6	106	98	57-156	8	30	
Chloroform	ug/L	ND	20	20	19.9	17.3	99	86	56-132	14	30	
Chloromethane	ug/L	ND	20	20	22.9	23.4	114	117	42-163	2	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.5	17.7	102	88	46-139	15	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	20.0	17.5	100	87	55-119	14	30	
Dibromochloromethane	ug/L	ND	20	20	19.3	17.3	97	87	52-129	11	30	
Dibromomethane	ug/L	ND	20	20	21.1	18.9	105	95	52-120	11	30	
Ethylbenzene	ug/L	ND	20	20	19.4	16.2	97	81	70-120	18	30	
Iodomethane	ug/L	ND	20	20	10.5J	14.4J	52	72	10-177		30	
Methyl-tert-butyl ether	ug/L	ND	20	20	18.0	18.3	90	91	63-143	1	30	
Methylene Chloride	ug/L	ND	20	20	20.2	16.9	101	84	38-134	18	30	
Naphthalene	ug/L	ND	20	20	22.4	19.9	112	99	55-122	12	30	
Styrene	ug/L	ND	20	20	18.8	16.8	94	84	49-135	12	30	
Tetrachloroethene	ug/L	ND	20	20	20.9	17.6	104	88	53-125	17	30	
Toluene	ug/L	ND	20	20	19.2	16.5	96	82	66-124	15	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.7	17.1	103	85	52-136	19	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.5	16.8	93	84	54-118	10	30	
trans-1,4-Dichloro-2-butene	ug/L	ND	20	20	13.8	15.4	69	77	19-116	11	30	
Trichloroethene	ug/L	ND	20	20	20.6	18.0	103	90	50-127	14	30	
Trichlorofluoromethane	ug/L	ND	20	20	19.3	19.9	97	100	63-167	3	30	
Vinyl acetate	ug/L	ND	20	20	22.4	22.1	112	111	10-49	1	30	MH
Vinyl chloride	ug/L	ND	20	20	20.9	21.3	105	107	54-149	2	30	
Xylene (Total)	ug/L	ND	60	60	58.4	51.3	97	85	68-123	13	30	
1,2-Dichloroethane-d4 (S)	%						100	100	70-128			
4-Bromofluorobenzene (S)	%						103	102	78-117			
Dibromofluoromethane (S)	%						105	107	66-132			
Toluene-d8 (S)	%						98	101	59-140			

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

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

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.

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA 1st Quarter 2017
Pace Project No.: 30213733

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30213733001	**CO36-PZM008**	EPA 8260B	253061		
30213733002	**CO36-PZM043**	EPA 8260B	253061		
30213733003	**CO38-PZM006**	EPA 8260B	253061		
30213733004	**CO38-PZM043**	EPA 8260B	253061		
30213733005	**CO27-PZM046**	EPA 8260B	253061		
30213733006	**CO27-PZM012**	EPA 8260B	253061		
30213733007	**CO37-PZM038**	EPA 8260B	253061		
30213733008	**TRIP BLANKS**	EPA 8260B	253061		

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

30213733

Section A
Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone: 314-620-3056	Fax:
Requested Due Date/TAT:	

Section B
Required Project Information:

Report To:	James Calenda
Copy To:	
Purchase Order No.:	EAG-SPT-6034
Project Name:	COA 1st Quarter 2017
Project Number:	

Section C
Invoice Information:

Attention:	Laura Sargent
Company Name:	Enviro Analytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

WO#:30213733

ITEM #	SAMPLE ID	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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): VOC + Napthalene 8260	Residu	Pace Project No./ Lab I.D.
1	CO36-PZM008	WT	G			3/20/16	1043		3				X					X		001
2	CO36-PZM043	WT	G			3/20/16	1124		3				X					X		002
3	CO38-PZM006	WT	G			3/20/16	1246		3				X					X		003
4	CO38-PZM043	WT	G			3/20/16	1315		3				X					X		004
5	CO27-PZM046	WT	G			3/20/16	1401		3				X					X		005
6	CO27-PZM012	WT	G			3/20/16	1436		3				X					X		006
7	CO37-PZM038	WT	G			3/20/16	1525		3				X					X		007
8	TRIP BLANKS								2											008
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
No Data Package Needed	EAG	3/20/17	1610	Pace	3/20/17	1610	4.1	Y	N	Y
	Pace	3/20/17	2130	Pace	3/20/17	2130				

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeff Wilson

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3/20/17

*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.

F-ALL-Q-020rev.06, 2-Feb-2007

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Enviro Analytics Project # 30213733

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 6 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 4.1 °C Correction Factor: +0.0 °C Final Temp: 4.1 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: RTB 3/20/17

Comments:	Yes	No	N/A		
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5. Labels on bags.	
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:		X		8.	
Sufficient Volume:	X			9.	
Correct Containers Used:	X			10.	
-Pace Containers Used:	X				
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Organic Samples checked for dechlorination:			X	13.	
Filtered volume received for Dissolved tests			X	14.	
All containers have been checked for preservation.			X	15.	
All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics			X	Initial when completed 3/20/17 RTB	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		X		16.	
Trip Blank Present:	X			17.	
Trip Blank Custody Seals Present	X				
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed:	Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

March 29, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
Sparrows Point Terminal
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on March 23, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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Greensburg, PA 15601
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CERTIFICATIONS

Project:	COA 1st Quarter 2017
Pace Project No.:	30214034

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30214034001	**CO58-PZM001**	Water	03/23/17 09:30	03/23/17 23:00
30214034002	**CO26-PZM007**	Water	03/23/17 10:26	03/23/17 23:00
30214034003	**CO60-PZP001**	Water	03/23/17 11:06	03/23/17 23:00
30214034004	**CO56-PZP001**	Water	03/23/17 11:41	03/23/17 23:00
30214034005	**CO55-PZM000**	Water	03/23/17 13:02	03/23/17 23:00
30214034006	**CO59-PZP002**	Water	03/23/17 13:54	03/23/17 23:00
30214034007	**CO24-PZM007**	Water	03/23/17 15:23	03/23/17 23:00
30214034008	**TRIP BLANKS**	Water	03/23/17 00:01	03/23/17 23:00

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SAMPLE ANALYTE COUNT

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30214034001	**CO58-PZM001**	EPA 8260B	LEL	53	PASI-PA
30214034002	**CO26-PZM007**	EPA 8260B	LEL	53	PASI-PA
30214034003	**CO60-PZP001**	EPA 8260B	LEL	53	PASI-PA
30214034004	**CO56-PZP001**	EPA 8260B	LEL	53	PASI-PA
30214034005	**CO55-PZM000**	EPA 8260B	LEL	53	PASI-PA
30214034006	**CO59-PZP002**	EPA 8260B	LEL	53	PASI-PA
30214034007	**CO24-PZM007**	EPA 8260B	LEL	53	PASI-PA
30214034008	**TRIP BLANKS**	EPA 8260B	LEL	53	PASI-PA

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO58-PZM001 **Lab ID: 30214034001** Collected: 03/23/17 09:30 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/27/17 16:48	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 16:48	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 16:48	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 16:48	79-00-5	
1,1-Dichloroethane	**0.39J**	ug/L	1.0	0.37	1		03/27/17 16:48	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 16:48	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 16:48	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 16:48	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/27/17 16:48	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 16:48	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 16:48	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 16:48	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 16:48	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/27/17 16:48	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/27/17 16:48	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/27/17 16:48	108-10-1	
Acetone	**19.9**	ug/L	10.0	3.5	1		03/27/17 16:48	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/27/17 16:48	107-13-1	
Benzene	**316**	ug/L	1.0	0.21	1		03/27/17 16:48	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/27/17 16:48	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 16:48	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 16:48	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 16:48	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/27/17 16:48	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 16:48	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 16:48	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/27/17 16:48	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/27/17 16:48	67-66-3	
Chloromethane	**3.8**	ug/L	1.0	0.51	1		03/27/17 16:48	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 16:48	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 16:48	74-95-3	
Ethylbenzene	**13.4**	ug/L	1.0	0.24	1		03/27/17 16:48	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/27/17 16:48	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 16:48	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/27/17 16:48	75-09-2	
Naphthalene	**3040**	ug/L	20.0	2.2	10		03/27/17 17:14	91-20-3	L1
Styrene	**45.1**	ug/L	1.0	0.17	1		03/27/17 16:48	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/27/17 16:48	127-18-4	
Toluene	**146**	ug/L	1.0	0.21	1		03/27/17 16:48	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 16:48	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/27/17 16:48	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/27/17 16:48	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/27/17 16:48	75-01-4	
Xylene (Total)	**249**	ug/L	3.0	0.47	1		03/27/17 16:48	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/27/17 16:48	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 16:48	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO58-PZM001 **Lab ID: 30214034001** Collected: 03/23/17 09:30 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 16:48	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 16:48	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 16:48	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	78-117		1		03/27/17 16:48	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-128		1		03/27/17 16:48	17060-07-0	
Toluene-d8 (S)	103	%	59-140		1		03/27/17 16:48	2037-26-5	
Dibromofluoromethane (S)	99	%	66-132		1		03/27/17 16:48	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO26-PZM007 **Lab ID: 30214034002** Collected: 03/23/17 10:26 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/27/17 17:40	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 17:40	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 17:40	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 17:40	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/27/17 17:40	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 17:40	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 17:40	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 17:40	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/27/17 17:40	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 17:40	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 17:40	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 17:40	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 17:40	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/27/17 17:40	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/27/17 17:40	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/27/17 17:40	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/27/17 17:40	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/27/17 17:40	107-13-1	
Benzene	**410**	ug/L	20.0	4.2	20		03/27/17 18:05	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/27/17 17:40	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 17:40	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 17:40	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 17:40	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/27/17 17:40	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 17:40	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 17:40	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/27/17 17:40	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/27/17 17:40	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/27/17 17:40	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 17:40	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 17:40	74-95-3	
Ethylbenzene	**14.7**	ug/L	1.0	0.24	1		03/27/17 17:40	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/27/17 17:40	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 17:40	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/27/17 17:40	75-09-2	
Naphthalene	**6130**	ug/L	40.0	4.4	20		03/27/17 18:05	91-20-3	L1
Styrene	**97.8**	ug/L	1.0	0.17	1		03/27/17 17:40	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/27/17 17:40	127-18-4	
Toluene	**236**	ug/L	1.0	0.21	1		03/27/17 17:40	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 17:40	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/27/17 17:40	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/27/17 17:40	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/27/17 17:40	75-01-4	
Xylene (Total)	**337**	ug/L	3.0	0.47	1		03/27/17 17:40	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/27/17 17:40	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 17:40	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO26-PZM007 **Lab ID: 30214034002** Collected: 03/23/17 10:26 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 17:40	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 17:40	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 17:40	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	78-117		1		03/27/17 17:40	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-128		1		03/27/17 17:40	17060-07-0	
Toluene-d8 (S)	104	%	59-140		1		03/27/17 17:40	2037-26-5	
Dibromofluoromethane (S)	94	%	66-132		1		03/27/17 17:40	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO60-PZP001 **Lab ID: 30214034003** Collected: 03/23/17 11:06 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/27/17 16:23	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 16:23	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 16:23	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 16:23	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/27/17 16:23	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 16:23	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 16:23	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 16:23	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/27/17 16:23	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 16:23	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 16:23	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 16:23	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 16:23	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/27/17 16:23	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/27/17 16:23	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/27/17 16:23	108-10-1	
Acetone	**23.0**	ug/L	10.0	3.5	1		03/27/17 16:23	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/27/17 16:23	107-13-1	
Benzene	**151**	ug/L	1.0	0.21	1		03/27/17 16:23	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/27/17 16:23	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 16:23	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 16:23	75-25-2	
Bromomethane	**3.0**	ug/L	1.0	0.53	1		03/27/17 16:23	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/27/17 16:23	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 16:23	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 16:23	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/27/17 16:23	75-00-3	
Chloroform	**1.7**	ug/L	1.0	0.40	1		03/27/17 16:23	67-66-3	
Chloromethane	**1.8**	ug/L	1.0	0.51	1		03/27/17 16:23	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 16:23	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 16:23	74-95-3	
Ethylbenzene	**3.7**	ug/L	1.0	0.24	1		03/27/17 16:23	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/27/17 16:23	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 16:23	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/27/17 16:23	75-09-2	
Naphthalene	**676**	ug/L	20.0	2.2	10		03/28/17 18:54	91-20-3	
Styrene	**16.4**	ug/L	1.0	0.17	1		03/27/17 16:23	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/27/17 16:23	127-18-4	
Toluene	**19.3**	ug/L	1.0	0.21	1		03/27/17 16:23	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 16:23	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/27/17 16:23	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/27/17 16:23	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/27/17 16:23	75-01-4	
Xylene (Total)	**73.9**	ug/L	3.0	0.47	1		03/27/17 16:23	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/27/17 16:23	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 16:23	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO60-PZP001 **Lab ID: 30214034003** Collected: 03/23/17 11:06 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 16:23	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 16:23	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 16:23	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	78-117		1		03/27/17 16:23	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-128		1		03/27/17 16:23	17060-07-0	
Toluene-d8 (S)	107	%	59-140		1		03/27/17 16:23	2037-26-5	
Dibromofluoromethane (S)	98	%	66-132		1		03/27/17 16:23	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO56-PZP001 **Lab ID: 30214034004** Collected: 03/23/17 11:41 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 20:13	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 20:13	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:13	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:13	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		03/27/17 20:13	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:13	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 20:13	96-18-4	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 20:13	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.1	5		03/27/17 20:13	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 20:13	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 20:13	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 20:13	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:13	106-46-7	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	12.1	5		03/27/17 20:13	78-93-3	
2-Hexanone	**50.0 U**	ug/L	50.0	1.2	5		03/27/17 20:13	591-78-6	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	1.6	5		03/27/17 20:13	108-10-1	
Acetone	**50.2**	ug/L	50.0	17.6	5		03/27/17 20:13	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.4	5		03/27/17 20:13	107-13-1	
Benzene	**437**	ug/L	5.0	1.0	5		03/27/17 20:13	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 20:13	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	1.2	5		03/27/17 20:13	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	1.5	5		03/27/17 20:13	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 20:13	74-83-9	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.7	5		03/27/17 20:13	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 20:13	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 20:13	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	3.4	5		03/27/17 20:13	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	2.0	5		03/27/17 20:13	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	2.6	5		03/27/17 20:13	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 20:13	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.4	5		03/27/17 20:13	74-95-3	
Ethylbenzene	**14.0**	ug/L	5.0	1.2	5		03/27/17 20:13	100-41-4	
Iodomethane	**250 U**	ug/L	250	3.1	5		03/27/17 20:13	74-88-4	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:13	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 20:13	75-09-2	
Naphthalene	**17900**	ug/L	1000	110	500		03/27/17 20:39	91-20-3	L1
Styrene	**78.5**	ug/L	5.0	0.85	5		03/27/17 20:13	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	2.2	5		03/27/17 20:13	127-18-4	
Toluene	**186**	ug/L	5.0	1.0	5		03/27/17 20:13	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	1.0	5		03/27/17 20:13	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 20:13	75-69-4	
Vinyl acetate	**50.0 U**	ug/L	50.0	2.0	5		03/27/17 20:13	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		03/27/17 20:13	75-01-4	
Xylene (Total)	**313**	ug/L	15.0	2.4	5		03/27/17 20:13	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.8	5		03/27/17 20:13	156-59-2	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		03/27/17 20:13	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO56-PZP001 **Lab ID: 30214034004** Collected: 03/23/17 11:41 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.4	5		03/27/17 20:13	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.85	5		03/27/17 20:13	10061-02-6	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.7	5		03/27/17 20:13	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	78-117		5		03/27/17 20:13	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-128		5		03/27/17 20:13	17060-07-0	
Toluene-d8 (S)	101	%	59-140		5		03/27/17 20:13	2037-26-5	
Dibromofluoromethane (S)	100	%	66-132		5		03/27/17 20:13	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO55-PZM000 **Lab ID: 30214034005** Collected: 03/23/17 13:02 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/27/17 15:06	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 15:06	71-55-6	R1
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:06	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:06	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/27/17 15:06	75-34-3	R1
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 15:06	75-35-4	R1
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 15:06	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 15:06	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/27/17 15:06	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 15:06	95-50-1	R1
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 15:06	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 15:06	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:06	106-46-7	R1
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/27/17 15:06	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/27/17 15:06	591-78-6	MH
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/27/17 15:06	108-10-1	R1
Acetone	**50.0**	ug/L	10.0	3.5	1		03/27/17 15:06	67-64-1	MH,R1
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/27/17 15:06	107-13-1	R1
Benzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:06	71-43-2	ML
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/27/17 15:06	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 15:06	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 15:06	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 15:06	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/27/17 15:06	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 15:06	56-23-5	R1
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 15:06	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/27/17 15:06	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/27/17 15:06	67-66-3	
Chloromethane	**1.6**	ug/L	1.0	0.51	1		03/27/17 15:06	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 15:06	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 15:06	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 15:06	100-41-4	ML
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/27/17 15:06	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 15:06	1634-04-4	R1
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/27/17 15:06	75-09-2	R1
Naphthalene	**2.0 U**	ug/L	2.0	0.22	1		03/27/17 15:06	91-20-3	L1
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 15:06	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/27/17 15:06	127-18-4	R1
Toluene	**0.33J**	ug/L	1.0	0.21	1		03/27/17 15:06	108-88-3	ML
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 15:06	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/27/17 15:06	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/27/17 15:06	108-05-4	MH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/27/17 15:06	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.47	1		03/27/17 15:06	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/27/17 15:06	156-59-2	R1
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 15:06	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO55-PZM000 **Lab ID: 30214034005** Collected: 03/23/17 13:02 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 15:06	156-60-5	R1
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 15:06	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 15:06	110-57-6	R1
Surrogates									
4-Bromofluorobenzene (S)	105	%	78-117		1		03/27/17 15:06	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-128		1		03/27/17 15:06	17060-07-0	
Toluene-d8 (S)	104	%	59-140		1		03/27/17 15:06	2037-26-5	
Dibromofluoromethane (S)	101	%	66-132		1		03/27/17 15:06	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO59-PZP002 **Lab ID: 30214034006** Collected: 03/23/17 13:54 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/27/17 18:31	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 18:31	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 18:31	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 18:31	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/27/17 18:31	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 18:31	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 18:31	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 18:31	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/27/17 18:31	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 18:31	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 18:31	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 18:31	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 18:31	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/27/17 18:31	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/27/17 18:31	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/27/17 18:31	108-10-1	
Acetone	**19.0**	ug/L	10.0	3.5	1		03/27/17 18:31	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/27/17 18:31	107-13-1	
Benzene	**393**	ug/L	1.0	0.21	1		03/27/17 18:31	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/27/17 18:31	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 18:31	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 18:31	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 18:31	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/27/17 18:31	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 18:31	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 18:31	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/27/17 18:31	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/27/17 18:31	67-66-3	
Chloromethane	**1.0**	ug/L	1.0	0.51	1		03/27/17 18:31	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 18:31	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 18:31	74-95-3	
Ethylbenzene	**19.5**	ug/L	1.0	0.24	1		03/27/17 18:31	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/27/17 18:31	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 18:31	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/27/17 18:31	75-09-2	
Naphthalene	**4720**	ug/L	100	11.0	50		03/27/17 18:56	91-20-3	L1
Styrene	**22.8**	ug/L	1.0	0.17	1		03/27/17 18:31	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/27/17 18:31	127-18-4	
Toluene	**230**	ug/L	1.0	0.21	1		03/27/17 18:31	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 18:31	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/27/17 18:31	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/27/17 18:31	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/27/17 18:31	75-01-4	
Xylene (Total)	**325**	ug/L	3.0	0.47	1		03/27/17 18:31	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/27/17 18:31	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 18:31	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO59-PZP002 **Lab ID: 30214034006** Collected: 03/23/17 13:54 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 18:31	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 18:31	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 18:31	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	78-117		1		03/27/17 18:31	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-128		1		03/27/17 18:31	17060-07-0	
Toluene-d8 (S)	103	%	59-140		1		03/27/17 18:31	2037-26-5	
Dibromofluoromethane (S)	97	%	66-132		1		03/27/17 18:31	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO24-PZM007 **Lab ID: 30214034007** Collected: 03/23/17 15:23 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/27/17 19:22	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 19:22	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 19:22	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 19:22	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/27/17 19:22	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 19:22	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 19:22	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 19:22	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/27/17 19:22	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 19:22	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 19:22	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 19:22	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 19:22	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/27/17 19:22	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/27/17 19:22	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/27/17 19:22	108-10-1	
Acetone	**35.6**	ug/L	10.0	3.5	1		03/27/17 19:22	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/27/17 19:22	107-13-1	
Benzene	**5.0**	ug/L	1.0	0.21	1		03/27/17 19:22	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/27/17 19:22	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 19:22	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 19:22	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 19:22	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/27/17 19:22	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 19:22	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 19:22	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/27/17 19:22	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/27/17 19:22	67-66-3	
Chloromethane	**1.4**	ug/L	1.0	0.51	1		03/27/17 19:22	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 19:22	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 19:22	74-95-3	
Ethylbenzene	**4.5**	ug/L	1.0	0.24	1		03/27/17 19:22	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/27/17 19:22	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 19:22	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/27/17 19:22	75-09-2	
Naphthalene	**5900**	ug/L	100	11.0	50		03/27/17 19:48	91-20-3	L1
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 19:22	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/27/17 19:22	127-18-4	
Toluene	**3.4**	ug/L	1.0	0.21	1		03/27/17 19:22	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 19:22	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/27/17 19:22	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/27/17 19:22	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/27/17 19:22	75-01-4	
Xylene (Total)	**10.9**	ug/L	3.0	0.47	1		03/27/17 19:22	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/27/17 19:22	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 19:22	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: CO24-PZM007 **Lab ID: 30214034007** Collected: 03/23/17 15:23 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 19:22	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 19:22	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 19:22	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	78-117		1		03/27/17 19:22	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-128		1		03/27/17 19:22	17060-07-0	
Toluene-d8 (S)	102	%	59-140		1		03/27/17 19:22	2037-26-5	
Dibromofluoromethane (S)	100	%	66-132		1		03/27/17 19:22	1868-53-7	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: TRIP BLANKS **Lab ID: 30214034008** Collected: 03/23/17 00:01 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.36	1		03/27/17 12:32	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 12:32	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:32	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:32	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.37	1		03/27/17 12:32	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 12:32	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 12:32	96-18-4	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 12:32	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.22	1		03/27/17 12:32	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 12:32	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 12:32	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 12:32	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:32	106-46-7	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	2.4	1		03/27/17 12:32	78-93-3	
2-Hexanone	**10.0 U**	ug/L	10.0	0.25	1		03/27/17 12:32	591-78-6	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.32	1		03/27/17 12:32	108-10-1	
Acetone	**10.0 U**	ug/L	10.0	3.5	1		03/27/17 12:32	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.47	1		03/27/17 12:32	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:32	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.52	1		03/27/17 12:32	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 12:32	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.30	1		03/27/17 12:32	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.53	1		03/27/17 12:32	74-83-9	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.34	1		03/27/17 12:32	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 12:32	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 12:32	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.68	1		03/27/17 12:32	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.40	1		03/27/17 12:32	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.51	1		03/27/17 12:32	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 12:32	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.47	1		03/27/17 12:32	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.24	1		03/27/17 12:32	100-41-4	
Iodomethane	**50.0 U**	ug/L	50.0	0.62	1		03/27/17 12:32	74-88-4	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:32	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.55	1		03/27/17 12:32	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.22	1		03/27/17 12:32	91-20-3	L1
Styrene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 12:32	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.43	1		03/27/17 12:32	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.21	1		03/27/17 12:32	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.20	1		03/27/17 12:32	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.31	1		03/27/17 12:32	75-69-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.40	1		03/27/17 12:32	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.33	1		03/27/17 12:32	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.47	1		03/27/17 12:32	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.56	1		03/27/17 12:32	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		03/27/17 12:32	10061-01-5	

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ANALYTICAL RESULTS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Sample: TRIP BLANKS **Lab ID: 30214034008** Collected: 03/23/17 00:01 Received: 03/23/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.29	1		03/27/17 12:32	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		03/27/17 12:32	10061-02-6	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.54	1		03/27/17 12:32	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	106	%	78-117		1		03/27/17 12:32	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-128		1		03/27/17 12:32	17060-07-0	
Toluene-d8 (S)	105	%	59-140		1		03/27/17 12:32	2037-26-5	
Dibromofluoromethane (S)	105	%	66-132		1		03/27/17 12:32	1868-53-7	

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

QC Batch: 253348 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30214034001, 30214034002, 30214034003, 30214034004, 30214034005, 30214034006, 30214034007, 30214034008

METHOD BLANK: 1247178 | Matrix: Water
Associated Lab Samples: 30214034001, 30214034002, 30214034003, 30214034004, 30214034005, 30214034006, 30214034007, 30214034008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.36	03/27/17 12:07	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.53	03/27/17 12:07	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.21	03/27/17 12:07	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.21	03/27/17 12:07	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.37	03/27/17 12:07	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.20	03/27/17 12:07	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.47	03/27/17 12:07	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.54	03/27/17 12:07	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.22	03/27/17 12:07	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.17	03/27/17 12:07	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.30	03/27/17 12:07	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.29	03/27/17 12:07	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	03/27/17 12:07	
2-Butanone (MEK)	ug/L	10.0 U	10.0	2.4	03/27/17 12:07	
2-Hexanone	ug/L	10.0 U	10.0	0.25	03/27/17 12:07	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.32	03/27/17 12:07	
Acetone	ug/L	10.0 U	10.0	3.5	03/27/17 12:07	
Acrylonitrile	ug/L	4.0 U	4.0	0.47	03/27/17 12:07	
Benzene	ug/L	1.0 U	1.0	0.21	03/27/17 12:07	
Bromochloromethane	ug/L	1.0 U	1.0	0.52	03/27/17 12:07	
Bromodichloromethane	ug/L	1.0 U	1.0	0.24	03/27/17 12:07	
Bromoform	ug/L	1.0 U	1.0	0.30	03/27/17 12:07	
Bromomethane	ug/L	1.0 U	1.0	0.53	03/27/17 12:07	
Carbon disulfide	ug/L	1.0 U	1.0	0.34	03/27/17 12:07	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.47	03/27/17 12:07	
Chlorobenzene	ug/L	1.0 U	1.0	0.14	03/27/17 12:07	
Chloroethane	ug/L	1.0 U	1.0	0.68	03/27/17 12:07	
Chloroform	ug/L	1.0 U	1.0	0.40	03/27/17 12:07	
Chloromethane	ug/L	1.0 U	1.0	0.51	03/27/17 12:07	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.56	03/27/17 12:07	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	03/27/17 12:07	
Dibromochloromethane	ug/L	1.0 U	1.0	0.29	03/27/17 12:07	
Dibromomethane	ug/L	1.0 U	1.0	0.47	03/27/17 12:07	
Ethylbenzene	ug/L	1.0 U	1.0	0.24	03/27/17 12:07	
Iodomethane	ug/L	50.0 U	50.0	0.62	03/27/17 12:07	
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.21	03/27/17 12:07	
Methylene Chloride	ug/L	1.0 U	1.0	0.55	03/27/17 12:07	
Naphthalene	ug/L	2.0 U	2.0	0.22	03/27/17 12:07	
Styrene	ug/L	1.0 U	1.0	0.17	03/27/17 12:07	
Tetrachloroethene	ug/L	1.0 U	1.0	0.43	03/27/17 12:07	

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.

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QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

METHOD BLANK: 1247178 Matrix: Water

Associated Lab Samples: 30214034001, 30214034002, 30214034003, 30214034004, 30214034005, 30214034006, 30214034007, 30214034008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.21	03/27/17 12:07	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.29	03/27/17 12:07	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	03/27/17 12:07	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.54	03/27/17 12:07	
Trichloroethene	ug/L	1.0 U	1.0	0.20	03/27/17 12:07	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.31	03/27/17 12:07	
Vinyl acetate	ug/L	10.0 U	10.0	0.40	03/27/17 12:07	
Vinyl chloride	ug/L	1.0 U	1.0	0.33	03/27/17 12:07	
Xylene (Total)	ug/L	3.0 U	3.0	0.47	03/27/17 12:07	
1,2-Dichloroethane-d4 (S)	%	102	70-128		03/27/17 12:07	
4-Bromofluorobenzene (S)	%	107	78-117		03/27/17 12:07	
Dibromofluoromethane (S)	%	102	66-132		03/27/17 12:07	
Toluene-d8 (S)	%	103	59-140		03/27/17 12:07	

LABORATORY CONTROL SAMPLE: 1247179

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.8	109	72-118	
1,1,1-Trichloroethane	ug/L	20	21.4	107	79-125	
1,1,2,2-Tetrachloroethane	ug/L	20	23.4	117	64-130	
1,1,2-Trichloroethane	ug/L	20	23.6	118	78-118	
1,1-Dichloroethane	ug/L	20	22.3	112	77-124	
1,1-Dichloroethene	ug/L	20	20.6	103	74-127	
1,2,3-Trichloropropane	ug/L	20	23.3	116	70-123	
1,2-Dibromo-3-chloropropane	ug/L	20	25.8	129	53-133	
1,2-Dibromoethane (EDB)	ug/L	20	21.8	109	69-126	
1,2-Dichlorobenzene	ug/L	20	22.8	114	83-117	
1,2-Dichloroethane	ug/L	20	21.9	109	73-118	
1,2-Dichloropropane	ug/L	20	21.5	107	77-126	
1,4-Dichlorobenzene	ug/L	20	22.6	113	83-119	
2-Butanone (MEK)	ug/L	20	21.4	107	55-134	
2-Hexanone	ug/L	20	26.7	134	78-156	
4-Methyl-2-pentanone (MIBK)	ug/L	20	18.6	93	63-121	
Acetone	ug/L	20	20.3	101	51-144	
Acrylonitrile	ug/L	20	24.9	125	39-170	
Benzene	ug/L	20	21.2	106	80-113	
Bromochloromethane	ug/L	20	20.9	104	78-114	
Bromodichloromethane	ug/L	20	22.8	114	78-121	
Bromoform	ug/L	20	25.1	125	71-130	
Bromomethane	ug/L	20	22.9	114	58-154	
Carbon disulfide	ug/L	20	19.2	96	66-152	
Carbon tetrachloride	ug/L	20	22.0	110	69-133	
Chlorobenzene	ug/L	20	22.6	113	85-116	

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

LABORATORY CONTROL SAMPLE: 1247179

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	20.3	102	76-136	
Chloroform	ug/L	20	21.9	109	76-118	
Chloromethane	ug/L	20	22.7	113	67-148	
cis-1,2-Dichloroethene	ug/L	20	22.4	112	77-126	
cis-1,3-Dichloropropene	ug/L	20	22.5	112	75-119	
Dibromochloromethane	ug/L	20	24.3	121	66-131	
Dibromomethane	ug/L	20	21.8	109	76-121	
Ethylbenzene	ug/L	20	21.5	107	80-115	
Iodomethane	ug/L	20	17.1J	86	10-149	
Methyl-tert-butyl ether	ug/L	20	18.7	94	82-126	
Methylene Chloride	ug/L	20	23.6	118	61-142	
Naphthalene	ug/L	20	28.0	140	61-139	L1
Styrene	ug/L	20	21.9	110	84-120	
Tetrachloroethene	ug/L	20	23.3	117	82-120	
Toluene	ug/L	20	21.2	106	82-116	
trans-1,2-Dichloroethene	ug/L	20	22.1	110	76-125	
trans-1,3-Dichloropropene	ug/L	20	23.5	118	73-119	
trans-1,4-Dichloro-2-butene	ug/L	20	19.7	99	27-116	
Trichloroethene	ug/L	20	20.8	104	84-116	
Trichlorofluoromethane	ug/L	20	18.6	93	59-138	
Vinyl acetate	ug/L	20	25.5	128	10-175	
Vinyl chloride	ug/L	20	20.0	100	63-133	
Xylene (Total)	ug/L	60	65.0	108	82-115	
1,2-Dichloroethane-d4 (S)	%			98	70-128	
4-Bromofluorobenzene (S)	%			102	78-117	
Dibromofluoromethane (S)	%			98	66-132	
Toluene-d8 (S)	%			102	59-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1247534 1247535

Parameter	Units	30214034005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	20	20	12.4	16.2	62	81	52-120	27	30	
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	11.6	16.2	58	81	54-140	33	30	R1
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	13.0	15.9	65	79	54-124	20	30	
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	13.5	16.7	67	83	58-120	21	30	
1,1-Dichloroethane	ug/L	1.0 U	20	20	11.4	16.0	57	80	55-133	34	30	R1
1,1-Dichloroethene	ug/L	1.0 U	20	20	11.0	15.3	55	76	48-141	33	30	R1
1,2,3-Trichloropropane	ug/L	1.0 U	20	20	14.0	16.7	70	84	51-116	18	30	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	20	20	15.9	17.0	79	85	23-126	7	30	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	20	20	13.0	16.2	65	81	58-115	22	30	
1,2-Dichlorobenzene	ug/L	1.0 U	20	20	12.2	17.0	61	85	57-124	33	30	R1
1,2-Dichloroethane	ug/L	1.0 U	20	20	12.8	16.1	64	80	58-123	23	30	
1,2-Dichloropropane	ug/L	1.0 U	20	20	12.0	16.3	60	81	55-125	30	30	

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1247534 1247535

Parameter	Units	30214034005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	1.0 U	20	20	12.5	17.2	63	86	61-111	31	30	R1
2-Butanone (MEK)	ug/L	10.0 U	20	20	25.4	19.2	127	96	43-128	28	30	
2-Hexanone	ug/L	10.0 U	20	20	30.7	22.7	154	113	43-135	30	30	MH
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	20	20	22.7	16.4	114	82	47-123	33	30	R1
Acetone	ug/L	50.0	20	20	106	73.1	280	115	10-150	37	30	MH,R1
Acrylonitrile	ug/L	4.0 U	20	20	28.1	20.4	141	102	31-182	32	30	R1
Benzene	ug/L	1.0 U	20	20	12.0	16.0	60	80	63-123	28	30	ML
Bromochloromethane	ug/L	1.0 U	20	20	11.8	16.0	59	80	42-149	30	30	
Bromodichloromethane	ug/L	1.0 U	20	20	12.5	16.6	63	83	55-127	28	30	
Bromoform	ug/L	1.0 U	20	20	13.2	16.4	66	82	44-131	22	30	
Bromomethane	ug/L	1.0 U	20	20	28.3	27.9	142	140	10-149	1	30	
Carbon disulfide	ug/L	1.0 U	20	20	22.8	17.0	114	85	47-158	29	30	
Carbon tetrachloride	ug/L	1.0 U	20	20	12.5	17.5	63	87	44-155	33	30	R1
Chlorobenzene	ug/L	1.0 U	20	20	12.3	16.7	62	84	57-121	30	30	
Chloroethane	ug/L	1.0 U	20	20	22.8	20.3	114	101	57-156	12	30	
Chloroform	ug/L	1.0 U	20	20	11.9	15.9	59	80	56-132	29	30	
Chloromethane	ug/L	1.6	20	20	28.6	29.2	135	138	42-163	2	30	
cis-1,2-Dichloroethene	ug/L	1.0 U	20	20	11.8	16.1	59	81	46-139	31	30	R1
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	12.2	16.0	61	80	55-119	27	30	
Dibromochloromethane	ug/L	1.0 U	20	20	13.3	17.2	67	86	52-129	25	30	
Dibromomethane	ug/L	1.0 U	20	20	14.2	17.3	71	86	52-120	20	30	
Ethylbenzene	ug/L	1.0 U	20	20	11.8	15.9	59	80	70-120	30	30	ML
Iodomethane	ug/L	50.0 U	20	20	21.9J	18.1J	109	91	10-177		30	
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	20.1	14.5	100	73	63-143	32	30	R1
Methylene Chloride	ug/L	1.0 U	20	20	11.7	16.8	58	84	38-134	36	30	R1
Naphthalene	ug/L	2.0 U	20	20	24.4	24.2	122	121	55-122	1	30	
Styrene	ug/L	1.0 U	20	20	11.1	15.0	56	75	49-135	29	30	
Tetrachloroethene	ug/L	1.0 U	20	20	13.3	18.1	66	91	53-125	31	30	R1
Toluene	ug/L	0.33J	20	20	11.6	15.5	56	76	66-124	29	30	ML
trans-1,2-Dichloroethene	ug/L	1.0 U	20	20	10.8	15.9	54	80	52-136	38	30	R1
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	12.4	16.0	62	80	54-118	26	30	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	20	20	18.1	13.2	91	66	19-116	32	30	R1
Trichloroethene	ug/L	1.0 U	20	20	11.9	16.2	60	81	50-127	30	30	
Trichlorofluoromethane	ug/L	1.0 U	20	20	21.5	20.6	107	103	63-167	4	30	
Vinyl acetate	ug/L	10.0 U	20	20	26.1	21.3	131	107	10-49	20	30	MH
Vinyl chloride	ug/L	1.0 U	20	20	22.5	21.0	113	105	54-149	7	30	
Xylene (Total)	ug/L	3.0 U	60	60	37.4	49.9	62	83	68-123	29	30	
1,2-Dichloroethane-d4 (S)	%						103	101	70-128			
4-Bromofluorobenzene (S)	%						104	103	78-117			
Dibromofluoromethane (S)	%						103	102	66-132			
Toluene-d8 (S)	%						106	104	59-140			

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

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.

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1	RPD value was outside control limits.

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA 1st Quarter 2017
Pace Project No.: 30214034

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30214034001	**CO58-PZM001**	EPA 8260B	253348		
30214034002	**CO26-PZM007**	EPA 8260B	253348		
30214034003	**CO60-PZP001**	EPA 8260B	253348		
30214034004	**CO56-PZP001**	EPA 8260B	253348		
30214034005	**CO55-PZM000**	EPA 8260B	253348		
30214034006	**CO59-PZP002**	EPA 8260B	253348		
30214034007	**CO24-PZM007**	EPA 8260B	253348		
30214034008	**TRIP BLANKS**	EPA 8260B	253348		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

30214034

Section A Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone: 314-620-3056	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	James Calenda
Copy To:	
Purchase Order No.:	EAG-SPT-6034
Project Name:	COA 1st Quarter 2017
Project Number:	

Section C Invoice Information:

Attention:	Laura Sargent
Company Name:	Enviro Analytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

WO#:30214034

30214034

ITEM #	SAMPLE ID	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)	VOC + Napthalene 8260	Resid	Pace Project No./ Lab I.D.
1	CO58-PZM001	WT	G			3/23/17	930		3				X						X		001
2	CO26-PZM007	WT	G			3/23/17	1026		3				X						X		002
3	CO60-PZP001	WT	G			3/23/17	1106		3				X						X		003
4	CO56-PZP001	WT	G			3/23/17	1141		3				X						X		004
5	CO55-PZM000	WT	G			3/23/17	1302		3				X						X		005
6	CO59-PZP002	WT	G			3/23/17	1354		3				X						X		006
7	CO24-PZM007	WT	G			3/23/17	1523		3				X						X		007
8	TRIP BLANKS	WT	G						2				X						X		008
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
No Data Package Needed	[signature]	3/23/17	1731	[signature] Pace	3/23/17	1731				
	[signature] Pace	3/23/17	1950	[signature] Pace	3/23/17	1950				
	[signature] Pace	3/23/17	2300	[signature] Pace	3/23/17	2300	4.1	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeff Wilson

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3/23/17

*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.

F-ALL-Q-020rev.06, 2-Feb-2007

Sample Condition Upon Receipt Pittsburgh

30214034 RC

Pace Analytical

Client Name: EnviroAnalytics Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 6 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 4.1 °C Correction Factor: +0.0 °C Final Temp: 4.1 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: RTB 3/23/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5. Labels on bags, not bottles.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.			X	15.
All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: (VOA) coliform, TOC, O&G, Phenolics			X	Initial when completed RTB 3/23/17 Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):		X		16.
Trip Blank Present:	X			17.
Trip Blank Custody Seals Present	X			
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed: Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 20, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
Sparrows Point Terminal
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on June 12, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project:	Coke Oven GW Sampling
Pace Project No.:	30221340

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30221340001	**Trip Blank 1**	Water	06/12/17 00:01	06/12/17 23:00
30221340002	**CO60-PZP001**	Water	06/12/17 09:02	06/12/17 23:00
30221340003	**CO26-PZM007**	Water	06/12/17 09:57	06/12/17 23:00
30221340004	**CO56-PZP001**	Water	06/12/17 11:04	06/12/17 23:00
30221340005	**CO58-PZM001**	Water	06/12/17 12:02	06/12/17 23:00
30221340006	**CO55-PZM000**	Water	06/12/17 13:16	06/12/17 23:00
30221340007	**CO59-PZP002**	Water	06/12/17 14:28	06/12/17 23:00
30221340008	**CO24-PZM007**	Water	06/12/17 15:27	06/12/17 23:00

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SAMPLE ANALYTE COUNT

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30221340001	**Trip Blank 1**	EPA 8260B	JAS	53
30221340002	**CO60-PZP001**	EPA 8260B	JAS	53
30221340003	**CO26-PZM007**	EPA 8260B	JAS	53
30221340004	**CO56-PZP001**	EPA 8260B	JAS	53
30221340005	**CO58-PZM001**	EPA 8260B	JAS	53
30221340006	**CO55-PZM000**	EPA 8260B	JAS	53
30221340007	**CO59-PZP002**	EPA 8260B	JAS	53
30221340008	**CO24-PZM007**	EPA 8260B	JAS	53

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PROJECT NARRATIVE

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Method: **EPA 8260B**
Description: 8260B MSV
Client: EnviroAnalytics Group, LLC
Date: June 20, 2017

General Information:
8 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 262319

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 1292114)
  - Acetone

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: Trip Blank 1 **Lab ID: 30221340001** Collected: 06/12/17 00:01 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/19/17 16:52	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/19/17 16:52	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 16:52	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/19/17 16:52	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/19/17 16:52	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/19/17 16:52	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/19/17 16:52	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/19/17 16:52	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 16:52	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 16:52	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/19/17 16:52	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/19/17 16:52	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 16:52	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/19/17 16:52	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/19/17 16:52	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/19/17 16:52	108-10-1	
Acetone	ND	ug/L	5.0	3.8	1		06/19/17 16:52	67-64-1	L2
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/19/17 16:52	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 16:52	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/19/17 16:52	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/19/17 16:52	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/19/17 16:52	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/19/17 16:52	74-83-9	IH
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/19/17 16:52	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 16:52	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 16:52	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/19/17 16:52	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 16:52	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 16:52	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 16:52	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 16:52	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 16:52	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/19/17 16:52	74-88-4	IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/19/17 16:52	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/19/17 16:52	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.39	1		06/19/17 16:52	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.18	1		06/19/17 16:52	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 16:52	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.29	1		06/19/17 16:52	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/19/17 16:52	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 16:52	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/19/17 16:52	108-05-4	IH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 16:52	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.1	1		06/19/17 16:52	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 16:52	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 16:52	10061-01-5	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: Trip Blank 1 **Lab ID: 30221340001** Collected: 06/12/17 00:01 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 16:52	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/19/17 16:52	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/19/17 16:52	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	105	%	78-117		1		06/19/17 16:52	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-128		1		06/19/17 16:52	17060-07-0	
Toluene-d8 (S)	97	%	59-140		1		06/19/17 16:52	2037-26-5	
Dibromofluoromethane (S)	100	%	66-132		1		06/19/17 16:52	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO60-PZP001 **Lab ID: 30221340002** Collected: 06/12/17 09:02 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/19/17 23:12	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/19/17 23:12	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 23:12	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/19/17 23:12	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/19/17 23:12	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/19/17 23:12	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/19/17 23:12	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/19/17 23:12	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 23:12	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 23:12	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/19/17 23:12	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/19/17 23:12	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 23:12	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/19/17 23:12	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/19/17 23:12	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/19/17 23:12	108-10-1	
Acetone	**9.7J**	ug/L	5.0	3.8	1		06/19/17 23:12	67-64-1	L2
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/19/17 23:12	107-13-1	
Benzene	**133**	ug/L	1.0	0.35	1		06/19/17 23:12	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/19/17 23:12	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/19/17 23:12	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/19/17 23:12	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/19/17 23:12	74-83-9	IH
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/19/17 23:12	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 23:12	56-23-5	
Chlorobenzene	**0.26J**	ug/L	1.0	0.19	1		06/19/17 23:12	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/19/17 23:12	75-00-3	
Chloroform	**1.8**	ug/L	1.0	0.33	1		06/19/17 23:12	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 23:12	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 23:12	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 23:12	74-95-3	
Ethylbenzene	**2.4**	ug/L	1.0	0.21	1		06/19/17 23:12	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/19/17 23:12	74-88-4	IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/19/17 23:12	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/19/17 23:12	75-09-2	
Naphthalene	**373**	ug/L	2.0	0.39	1		06/19/17 23:12	91-20-3	
Styrene	**3.4**	ug/L	1.0	0.18	1		06/19/17 23:12	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 23:12	127-18-4	
Toluene	**12.9**	ug/L	1.0	0.29	1		06/19/17 23:12	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/19/17 23:12	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 23:12	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/19/17 23:12	108-05-4	IH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 23:12	75-01-4	
Xylene (Total)	**47.3**	ug/L	1.0	1.1	1		06/19/17 23:12	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 23:12	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 23:12	10061-01-5	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO60-PZP001 **Lab ID: 30221340002** Collected: 06/12/17 09:02 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 23:12	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/19/17 23:12	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/19/17 23:12	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	107	%	78-117		1		06/19/17 23:12	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-128		1		06/19/17 23:12	17060-07-0	
Toluene-d8 (S)	96	%	59-140		1		06/19/17 23:12	2037-26-5	
Dibromofluoromethane (S)	98	%	66-132		1		06/19/17 23:12	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO26-PZM007 **Lab ID: 30221340003** Collected: 06/12/17 09:57 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/19/17 18:41	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/19/17 18:41	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 18:41	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/19/17 18:41	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/19/17 18:41	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/19/17 18:41	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/19/17 18:41	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/19/17 18:41	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 18:41	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 18:41	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/19/17 18:41	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/19/17 18:41	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 18:41	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/19/17 18:41	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/19/17 18:41	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/19/17 18:41	108-10-1	
Acetone	ND	ug/L	5.0	3.8	1		06/19/17 18:41	67-64-1	L2
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/19/17 18:41	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 18:41	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/19/17 18:41	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/19/17 18:41	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/19/17 18:41	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/19/17 18:41	74-83-9	IH
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/19/17 18:41	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 18:41	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 18:41	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/19/17 18:41	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 18:41	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 18:41	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 18:41	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 18:41	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 18:41	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/19/17 18:41	74-88-4	IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/19/17 18:41	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/19/17 18:41	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.39	1		06/19/17 18:41	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.18	1		06/19/17 18:41	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 18:41	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.29	1		06/19/17 18:41	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/19/17 18:41	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 18:41	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/19/17 18:41	108-05-4	IH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 18:41	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.1	1		06/19/17 18:41	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 18:41	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 18:41	10061-01-5	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO26-PZM007 **Lab ID: 30221340003** Collected: 06/12/17 09:57 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 18:41	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/19/17 18:41	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/19/17 18:41	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	104	%	78-117		1		06/19/17 18:41	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-128		1		06/19/17 18:41	17060-07-0	
Toluene-d8 (S)	96	%	59-140		1		06/19/17 18:41	2037-26-5	
Dibromofluoromethane (S)	98	%	66-132		1		06/19/17 18:41	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO56-PZP001 **Lab ID: 30221340004** Collected: 06/12/17 11:04 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/19/17 22:18	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/19/17 22:18	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 22:18	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/19/17 22:18	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/19/17 22:18	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/19/17 22:18	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/19/17 22:18	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/19/17 22:18	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 22:18	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 22:18	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/19/17 22:18	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/19/17 22:18	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 22:18	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/19/17 22:18	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/19/17 22:18	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/19/17 22:18	108-10-1	
Acetone	**7.6J**	ug/L	5.0	3.8	1		06/19/17 22:18	67-64-1	L2
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/19/17 22:18	107-13-1	
Benzene	**345**	ug/L	1.0	0.35	1		06/19/17 22:18	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/19/17 22:18	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/19/17 22:18	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/19/17 22:18	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/19/17 22:18	74-83-9	IH
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/19/17 22:18	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 22:18	56-23-5	
Chlorobenzene	**0.60J**	ug/L	1.0	0.19	1		06/19/17 22:18	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/19/17 22:18	75-00-3	
Chloroform	**0.50J**	ug/L	1.0	0.33	1		06/19/17 22:18	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 22:18	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 22:18	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 22:18	74-95-3	
Ethylbenzene	**9.2**	ug/L	1.0	0.21	1		06/19/17 22:18	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/19/17 22:18	74-88-4	IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/19/17 22:18	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/19/17 22:18	75-09-2	
Naphthalene	**4670**	ug/L	200	38.9	100		06/19/17 22:45	91-20-3	
Styrene	**36.2**	ug/L	1.0	0.18	1		06/19/17 22:18	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 22:18	127-18-4	
Toluene	**149**	ug/L	1.0	0.29	1		06/19/17 22:18	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/19/17 22:18	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 22:18	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/19/17 22:18	108-05-4	IH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 22:18	75-01-4	
Xylene (Total)	**196**	ug/L	1.0	1.1	1		06/19/17 22:18	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 22:18	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 22:18	10061-01-5	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO56-PZP001 **Lab ID: 30221340004** Collected: 06/12/17 11:04 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 22:18	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/19/17 22:18	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/19/17 22:18	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	106	%	78-117		1		06/19/17 22:18	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-128		1		06/19/17 22:18	17060-07-0	
Toluene-d8 (S)	97	%	59-140		1		06/19/17 22:18	2037-26-5	
Dibromofluoromethane (S)	96	%	66-132		1		06/19/17 22:18	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO58-PZM001 **Lab ID: 30221340005** Collected: 06/12/17 12:02 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/19/17 19:35	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/19/17 19:35	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 19:35	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/19/17 19:35	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/19/17 19:35	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/19/17 19:35	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/19/17 19:35	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/19/17 19:35	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 19:35	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 19:35	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/19/17 19:35	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/19/17 19:35	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 19:35	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/19/17 19:35	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/19/17 19:35	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/19/17 19:35	108-10-1	
Acetone	ND	ug/L	5.0	3.8	1		06/19/17 19:35	67-64-1	L2
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/19/17 19:35	107-13-1	
Benzene	**187**	ug/L	1.0	0.35	1		06/19/17 19:35	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/19/17 19:35	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/19/17 19:35	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/19/17 19:35	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/19/17 19:35	74-83-9	IH
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/19/17 19:35	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 19:35	56-23-5	
Chlorobenzene	**0.42J**	ug/L	1.0	0.19	1		06/19/17 19:35	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/19/17 19:35	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 19:35	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 19:35	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 19:35	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 19:35	74-95-3	
Ethylbenzene	**5.9**	ug/L	1.0	0.21	1		06/19/17 19:35	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/19/17 19:35	74-88-4	IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/19/17 19:35	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/19/17 19:35	75-09-2	
Naphthalene	**1420**	ug/L	100	19.4	50		06/19/17 20:03	91-20-3	
Styrene	**14.1**	ug/L	1.0	0.18	1		06/19/17 19:35	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 19:35	127-18-4	
Toluene	**63.3**	ug/L	1.0	0.29	1		06/19/17 19:35	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/19/17 19:35	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 19:35	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/19/17 19:35	108-05-4	IH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 19:35	75-01-4	
Xylene (Total)	**102**	ug/L	1.0	1.1	1		06/19/17 19:35	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 19:35	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 19:35	10061-01-5	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO58-PZM001 **Lab ID: 30221340005** Collected: 06/12/17 12:02 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 19:35	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/19/17 19:35	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/19/17 19:35	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	103	%	78-117		1		06/19/17 19:35	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-128		1		06/19/17 19:35	17060-07-0	
Toluene-d8 (S)	96	%	59-140		1		06/19/17 19:35	2037-26-5	
Dibromofluoromethane (S)	100	%	66-132		1		06/19/17 19:35	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO55-PZM000 **Lab ID: 30221340006** Collected: 06/12/17 13:16 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/19/17 18:14	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/19/17 18:14	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 18:14	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/19/17 18:14	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/19/17 18:14	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/19/17 18:14	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/19/17 18:14	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/19/17 18:14	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 18:14	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 18:14	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/19/17 18:14	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/19/17 18:14	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 18:14	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/19/17 18:14	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/19/17 18:14	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/19/17 18:14	108-10-1	
Acetone	ND	ug/L	5.0	3.8	1		06/19/17 18:14	67-64-1	L2
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/19/17 18:14	107-13-1	
Benzene	**9.4**	ug/L	1.0	0.35	1		06/19/17 18:14	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/19/17 18:14	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/19/17 18:14	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/19/17 18:14	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/19/17 18:14	74-83-9	IH
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/19/17 18:14	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 18:14	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 18:14	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/19/17 18:14	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 18:14	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 18:14	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 18:14	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 18:14	74-95-3	
Ethylbenzene	**0.23J**	ug/L	1.0	0.21	1		06/19/17 18:14	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/19/17 18:14	74-88-4	IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/19/17 18:14	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/19/17 18:14	75-09-2	
Naphthalene	**76.7**	ug/L	2.0	0.39	1		06/19/17 18:14	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.18	1		06/19/17 18:14	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 18:14	127-18-4	
Toluene	**5.9**	ug/L	1.0	0.29	1		06/19/17 18:14	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/19/17 18:14	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 18:14	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/19/17 18:14	108-05-4	IH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 18:14	75-01-4	
Xylene (Total)	**5.8**	ug/L	1.0	1.1	1		06/19/17 18:14	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 18:14	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 18:14	10061-01-5	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO55-PZM000 **Lab ID: 30221340006** Collected: 06/12/17 13:16 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 18:14	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/19/17 18:14	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/19/17 18:14	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	102	%	78-117		1		06/19/17 18:14	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-128		1		06/19/17 18:14	17060-07-0	
Toluene-d8 (S)	96	%	59-140		1		06/19/17 18:14	2037-26-5	
Dibromofluoromethane (S)	98	%	66-132		1		06/19/17 18:14	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO59-PZP002 **Lab ID: 30221340007** Collected: 06/12/17 14:28 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/19/17 20:30	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/19/17 20:30	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 20:30	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/19/17 20:30	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/19/17 20:30	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/19/17 20:30	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/19/17 20:30	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/19/17 20:30	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 20:30	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 20:30	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/19/17 20:30	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/19/17 20:30	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 20:30	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/19/17 20:30	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/19/17 20:30	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/19/17 20:30	108-10-1	
Acetone	**9.5J**	ug/L	5.0	3.8	1		06/19/17 20:30	67-64-1	L2
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/19/17 20:30	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 20:30	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/19/17 20:30	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/19/17 20:30	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/19/17 20:30	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/19/17 20:30	74-83-9	IH
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/19/17 20:30	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 20:30	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 20:30	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/19/17 20:30	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 20:30	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 20:30	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 20:30	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 20:30	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 20:30	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/19/17 20:30	74-88-4	IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/19/17 20:30	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/19/17 20:30	75-09-2	
Naphthalene	**3.3**	ug/L	2.0	0.39	1		06/19/17 20:30	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.18	1		06/19/17 20:30	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 20:30	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.29	1		06/19/17 20:30	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/19/17 20:30	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 20:30	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/19/17 20:30	108-05-4	IH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 20:30	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.1	1		06/19/17 20:30	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 20:30	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 20:30	10061-01-5	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO59-PZP002 **Lab ID: 30221340007** Collected: 06/12/17 14:28 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 20:30	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/19/17 20:30	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/19/17 20:30	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	108	%	78-117		1		06/19/17 20:30	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-128		1		06/19/17 20:30	17060-07-0	
Toluene-d8 (S)	95	%	59-140		1		06/19/17 20:30	2037-26-5	
Dibromofluoromethane (S)	100	%	66-132		1		06/19/17 20:30	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO24-PZM007 **Lab ID: 30221340008** Collected: 06/12/17 15:27 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/19/17 21:24	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/19/17 21:24	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 21:24	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/19/17 21:24	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/19/17 21:24	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/19/17 21:24	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/19/17 21:24	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/19/17 21:24	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 21:24	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 21:24	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/19/17 21:24	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/19/17 21:24	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 21:24	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/19/17 21:24	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/19/17 21:24	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/19/17 21:24	108-10-1	
Acetone	**22.7**	ug/L	5.0	3.8	1		06/19/17 21:24	67-64-1	L2
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/19/17 21:24	107-13-1	
Benzene	**3.7**	ug/L	1.0	0.35	1		06/19/17 21:24	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/19/17 21:24	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/19/17 21:24	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/19/17 21:24	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/19/17 21:24	74-83-9	IH
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/19/17 21:24	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 21:24	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.19	1		06/19/17 21:24	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/19/17 21:24	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 21:24	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 21:24	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/19/17 21:24	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/19/17 21:24	74-95-3	
Ethylbenzene	**2.8**	ug/L	1.0	0.21	1		06/19/17 21:24	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/19/17 21:24	74-88-4	IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/19/17 21:24	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/19/17 21:24	75-09-2	
Naphthalene	**2130**	ug/L	100	19.4	50		06/19/17 21:51	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.18	1		06/19/17 21:24	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/19/17 21:24	127-18-4	
Toluene	**2.4**	ug/L	1.0	0.29	1		06/19/17 21:24	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/19/17 21:24	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 21:24	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/19/17 21:24	108-05-4	IH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/19/17 21:24	75-01-4	
Xylene (Total)	**6.7**	ug/L	1.0	1.1	1		06/19/17 21:24	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/19/17 21:24	156-59-2	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/19/17 21:24	10061-01-5	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Sample: CO24-PZM007 **Lab ID: 30221340008** Collected: 06/12/17 15:27 Received: 06/12/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/19/17 21:24	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/19/17 21:24	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/19/17 21:24	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	106	%	78-117		1		06/19/17 21:24	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-128		1		06/19/17 21:24	17060-07-0	
Toluene-d8 (S)	98	%	59-140		1		06/19/17 21:24	2037-26-5	
Dibromofluoromethane (S)	101	%	66-132		1		06/19/17 21:24	1868-53-7	

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QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

QC Batch: 262319 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30221340001, 30221340002, 30221340003, 30221340004, 30221340005, 30221340006, 30221340007, 30221340008

METHOD BLANK: 1292113 | Matrix: Water
Associated Lab Samples: 30221340001, 30221340002, 30221340003, 30221340004, 30221340005, 30221340006, 30221340007, 30221340008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.23	06/19/17 14:09	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.22	06/19/17 14:09	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.19	06/19/17 14:09	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.45	06/19/17 14:09	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.34	06/19/17 14:09	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.20	06/19/17 14:09	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.41	06/19/17 14:09	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.43	06/19/17 14:09	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.48	06/19/17 14:09	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.37	06/19/17 14:09	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.36	06/19/17 14:09	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.62	06/19/17 14:09	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.44	06/19/17 14:09	
2-Butanone (MEK)	ug/L	10.0 U	10.0	5.5	06/19/17 14:09	IH
2-Hexanone	ug/L	10.0 U	10.0	1.7	06/19/17 14:09	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	1.7	06/19/17 14:09	
Acetone	ug/L	10.0 U	10.0	3.8	06/19/17 14:09	
Acrylonitrile	ug/L	4.0 U	4.0	4.0	06/19/17 14:09	
Benzene	ug/L	1.0 U	1.0	0.35	06/19/17 14:09	
Bromochloromethane	ug/L	1.0 U	1.0	0.56	06/19/17 14:09	
Bromodichloromethane	ug/L	1.0 U	1.0	0.43	06/19/17 14:09	
Bromoform	ug/L	1.0 U	1.0	0.40	06/19/17 14:09	
Bromomethane	ug/L	1.0 U	1.0	0.90	06/19/17 14:09	IH
Carbon disulfide	ug/L	1.0 U	1.0	0.25	06/19/17 14:09	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.32	06/19/17 14:09	
Chlorobenzene	ug/L	1.0 U	1.0	0.19	06/19/17 14:09	
Chloroethane	ug/L	1.0 U	1.0	0.42	06/19/17 14:09	
Chloroform	ug/L	1.0 U	1.0	0.33	06/19/17 14:09	
Chloromethane	ug/L	1.0 U	1.0	0.32	06/19/17 14:09	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.48	06/19/17 14:09	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.37	06/19/17 14:09	
Dibromochloromethane	ug/L	1.0 U	1.0	0.35	06/19/17 14:09	
Dibromomethane	ug/L	1.0 U	1.0	0.44	06/19/17 14:09	
Ethylbenzene	ug/L	1.0 U	1.0	0.21	06/19/17 14:09	
Iodomethane	ug/L	50.0 U	50.0	1.8	06/19/17 14:09	IL
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.27	06/19/17 14:09	
Methylene Chloride	ug/L	1.0 U	1.0	0.59	06/19/17 14:09	
Naphthalene	ug/L	2.0 U	2.0	0.39	06/19/17 14:09	
Styrene	ug/L	1.0 U	1.0	0.18	06/19/17 14:09	
Tetrachloroethene	ug/L	1.0 U	1.0	0.33	06/19/17 14:09	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

METHOD BLANK: 1292113 Matrix: Water

Associated Lab Samples: 30221340001, 30221340002, 30221340003, 30221340004, 30221340005, 30221340006, 30221340007, 30221340008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.29	06/19/17 14:09	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.32	06/19/17 14:09	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.74	06/19/17 14:09	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	5.0	06/19/17 14:09	IL
Trichloroethene	ug/L	1.0 U	1.0	0.50	06/19/17 14:09	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.32	06/19/17 14:09	
Vinyl acetate	ug/L	10.0 U	10.0	1.7	06/19/17 14:09	IH
Vinyl chloride	ug/L	1.0 U	1.0	0.21	06/19/17 14:09	
Xylene (Total)	ug/L	3.0 U	3.0	1.1	06/19/17 14:09	
1,2-Dichloroethane-d4 (S)	%	92	70-128		06/19/17 14:09	
4-Bromofluorobenzene (S)	%	102	78-117		06/19/17 14:09	
Dibromofluoromethane (S)	%	97	66-132		06/19/17 14:09	
Toluene-d8 (S)	%	98	59-140		06/19/17 14:09	

LABORATORY CONTROL SAMPLE: 1292114

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.4	97	72-118	
1,1,1-Trichloroethane	ug/L	20	17.2	86	79-125	
1,1,2,2-Tetrachloroethane	ug/L	20	20.2	101	64-130	
1,1,2-Trichloroethane	ug/L	20	19.1	95	78-118	
1,1-Dichloroethane	ug/L	20	16.9	84	77-124	
1,1-Dichloroethene	ug/L	20	15.9	80	74-127	
1,2,3-Trichloropropane	ug/L	20	20.3	101	70-123	
1,2-Dibromo-3-chloropropane	ug/L	20	20.3	102	53-133	
1,2-Dibromoethane (EDB)	ug/L	20	19.1	96	69-126	
1,2-Dichlorobenzene	ug/L	20	18.9	95	83-117	
1,2-Dichloroethane	ug/L	20	15.4	77	73-118	
1,2-Dichloropropane	ug/L	20	16.6	83	77-126	
1,4-Dichlorobenzene	ug/L	20	19.2	96	83-119	
2-Butanone (MEK)	ug/L	20	20.8	104	55-134	IH
2-Hexanone	ug/L	20	18.5	92	78-156	
4-Methyl-2-pentanone (MIBK)	ug/L	20	17.7	88	63-121	
Acetone	ug/L	20	9.6J	48	51-144	L2
Acrylonitrile	ug/L	20	15.3	76	39-170	
Benzene	ug/L	20	17.5	87	80-113	
Bromochloromethane	ug/L	20	18.4	92	78-114	
Bromodichloromethane	ug/L	20	18.2	91	78-121	
Bromoform	ug/L	20	20.4	102	71-130	
Bromomethane	ug/L	20	30.5	153	58-154	IH
Carbon disulfide	ug/L	20	14.4	72	66-152	
Carbon tetrachloride	ug/L	20	16.7	83	69-133	
Chlorobenzene	ug/L	20	18.8	94	85-116	

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(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

LABORATORY CONTROL SAMPLE: 1292114

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	20.5	102	76-136	
Chloroform	ug/L	20	16.8	84	76-118	
Chloromethane	ug/L	20	19.7	98	67-148	
cis-1,2-Dichloroethene	ug/L	20	16.5	83	77-126	
cis-1,3-Dichloropropene	ug/L	20	17.5	87	75-119	
Dibromochloromethane	ug/L	20	19.5	98	66-131	
Dibromomethane	ug/L	20	18.2	91	76-121	
Ethylbenzene	ug/L	20	18.1	90	80-115	
Iodomethane	ug/L	20	22.0J	110	10-149	IL
Methyl-tert-butyl ether	ug/L	20	17.2	86	82-126	
Methylene Chloride	ug/L	20	15.0	75	61-142	
Naphthalene	ug/L	20	19.7	98	61-139	
Styrene	ug/L	20	18.7	93	84-120	
Tetrachloroethene	ug/L	20	18.3	91	82-120	
Toluene	ug/L	20	18.2	91	82-116	
trans-1,2-Dichloroethene	ug/L	20	15.8	79	76-125	
trans-1,3-Dichloropropene	ug/L	20	18.3	91	73-119	
trans-1,4-Dichloro-2-butene	ug/L	20	13.1	66	27-116	IL
Trichloroethene	ug/L	20	17.6	88	84-116	
Trichlorofluoromethane	ug/L	20	18.4	92	59-138	
Vinyl acetate	ug/L	20	19.0	95	10-175	IH
Vinyl chloride	ug/L	20	20.4	102	63-133	
Xylene (Total)	ug/L	60	55.9	93	82-115	
1,2-Dichloroethane-d4 (S)	%			85	70-128	
4-Bromofluorobenzene (S)	%			106	78-117	
Dibromofluoromethane (S)	%			95	66-132	
Toluene-d8 (S)	%			101	59-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1292314 1292315

Parameter	Units	30221515001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	20	20	20.0	20.4	100	102	52-120	2	30	
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	17.1	17.2	86	86	54-140	0	30	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	23.3	22.7	116	114	54-124	2	30	
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	19.1	19.2	96	96	58-120	0	30	
1,1-Dichloroethane	ug/L	1.0 U	20	20	16.3	16.2	81	81	55-133	1	30	
1,1-Dichloroethene	ug/L	1.0 U	20	20	17.6	19.0	88	95	48-141	8	30	
1,2,3-Trichloropropane	ug/L	1.0 U	20	20	22.8	22.7	114	114	51-116	0	30	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	20	20	22.7	21.9	114	110	23-126	4	30	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	20	20	19.8	19.2	99	96	58-115	3	30	
1,2-Dichlorobenzene	ug/L	1.0 U	20	20	21.2	21.1	106	106	57-124	0	30	
1,2-Dichloroethane	ug/L	1.0 U	20	20	15.1	16.0	75	80	58-123	6	30	
1,2-Dichloropropane	ug/L	1.0 U	20	20	16.4	17.5	82	87	55-125	7	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1292314 1292315

Parameter	Units	30221515001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	1.0 U	20	20	21.1	21.0	106	105	61-111	1	30	
2-Butanone (MEK)	ug/L	10.0 U	20	20	19.8	19.6	99	98	43-128	1	30	IH
2-Hexanone	ug/L	10.0 U	20	20	19.1	18.9	96	95	43-135	1	30	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	20	20	16.7	16.5	83	83	47-123	1	30	
Acetone	ug/L	4.1J	20	20	21.2	24.9	85	104	10-150	16	30	
Acrylonitrile	ug/L	4.0 U	20	20	14.1	15.6	70	78	31-182	10	30	
Benzene	ug/L	1.0 U	20	20	16.6	17.2	83	86	63-123	4	30	
Bromochloromethane	ug/L	1.0 U	20	20	18.8	18.0	94	90	42-149	4	30	
Bromodichloromethane	ug/L	1.0 U	20	20	17.9	18.1	90	90	55-127	1	30	
Bromoform	ug/L	1.0 U	20	20	19.8	20.9	99	104	44-131	5	30	
Bromomethane	ug/L	1.0 U	20	20	40.8	44.3	204	221	10-149	8	30	IH,MH
Carbon disulfide	ug/L	1.0 U	20	20	10.6	12.5	53	62	47-158	16	30	
Carbon tetrachloride	ug/L	1.0 U	20	20	16.1	16.0	81	80	44-155	1	30	
Chlorobenzene	ug/L	1.0 U	20	20	19.5	19.1	97	96	57-121	2	30	
Chloroethane	ug/L	1.0 U	20	20	23.1	21.2	115	106	57-156	8	30	
Chloroform	ug/L	1.0 U	20	20	16.7	17.2	84	86	56-132	3	30	
Chloromethane	ug/L	1.0 U	20	20	21.9	22.1	110	110	42-163	1	30	
cis-1,2-Dichloroethene	ug/L	1.0 U	20	20	15.6	16.2	78	81	46-139	4	30	
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	17.7	17.7	88	88	55-119	0	30	
Dibromochloromethane	ug/L	1.0 U	20	20	20.5	19.8	102	99	52-129	3	30	
Dibromomethane	ug/L	1.0 U	20	20	17.9	18.8	90	94	52-120	5	30	
Ethylbenzene	ug/L	1.0 U	20	20	18.1	18.6	91	93	70-120	2	30	
Iodomethane	ug/L	50.0 U	20	20	17.9J	17.9J	90	90	10-177		30	IL
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	14.8	15.3	74	76	63-143	3	30	
Methylene Chloride	ug/L	1.0 U	20	20	14.3	13.9	71	70	38-134	3	30	
Naphthalene	ug/L	2.0 U	20	20	24.8	23.1	124	115	55-122	7	30	MH
Styrene	ug/L	1.0 U	20	20	19.2	18.8	96	94	49-135	2	30	
Tetrachloroethene	ug/L	1.0 U	20	20	18.8	18.6	94	93	53-125	1	30	
Toluene	ug/L	1.0 U	20	20	18.3	18.4	91	92	66-124	0	30	
trans-1,2-Dichloroethene	ug/L	1.0 U	20	20	15.7	16.3	78	81	52-136	4	30	
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	18.7	18.7	93	94	54-118	0	30	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	20	20	11.5	11.8	57	59	19-116	3	30	IL
Trichloroethene	ug/L	1.0 U	20	20	17.6	18.7	88	93	50-127	6	30	
Trichlorofluoromethane	ug/L	1.0 U	20	20	21.3	21.5	107	108	63-167	1	30	
Vinyl acetate	ug/L	10.0 U	20	20	17.0	17.7	85	89	10-49	4	30	IH,MH
Vinyl chloride	ug/L	1.0 U	20	20	22.6	22.9	113	115	54-149	1	30	
Xylene (Total)	ug/L	3.0 U	60	60	58.8	58.4	98	97	68-123	1	30	
1,2-Dichloroethane-d4 (S)	%						91	91	70-128			
4-Bromofluorobenzene (S)	%						104	106	78-117			
Dibromofluoromethane (S)	%						95	100	66-132			
Toluene-d8 (S)	%						103	101	59-140			

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QUALIFIERS

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

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.

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

IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
IL	This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven GW Sampling
Pace Project No.: 30221340

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30221340001	**Trip Blank 1**	EPA 8260B	262319		
30221340002	**CO60-PZP001**	EPA 8260B	262319		
30221340003	**CO26-PZM007**	EPA 8260B	262319		
30221340004	**CO56-PZP001**	EPA 8260B	262319		
30221340005	**CO58-PZM001**	EPA 8260B	262319		
30221340006	**CO55-PZM000**	EPA 8260B	262319		
30221340007	**CO59-PZP002**	EPA 8260B	262319		
30221340008	**CO24-PZM007**	EPA 8260B	262319		

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WO#: 30221340

30221340

CHAIN-OF-CUSTODY / Analytical Request Document

This chain-of-custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Page: 1 of 1

Section A
Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone: 314-620-3056	Fax:
Requested Due Date/TAT:	5 days

Required Project Information:

Report To:	James Calenda
Copy To:	
PO Number:	
Project Name:	Coke oven GW Sampling
Project Number:	~~170384-1-[illegible]~~ 170384-1-2

Section C
Invoice Information:

Attention:	Laura Sargent
Company Name:	EnviroAnalytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	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	DI Water	Analysis Test (Y/N): VOC/8260B	SVOC 8270D	DRO/8015B	GRO/8015B	METALS/6010C	Mercury/7471A or 7470A	Hexavalent Chromium/7196A	Total Cyanide/9012A	PCB/8082 (soil)		Oil and Grease/1664A (aq	Oil and Grease/9071B (soil)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip blank 1	WT	G			6/12/17			2				X					X													
2	C060-PZP001	WT	G				0902		3				X					X													
3	C026-PZM007	WT	G				0957		3				X					X													
4	C056-PZP001	WT	G				1104		3				X					X													
5	C058-PZM001	WT	G				1202		3				X					X													
6	C055-PZM000	WT	G				1316		~~3~~ 2				X					X													Only 2 samples
7	C059-PZP002	WT	G				1428		3				X					X													
8	C024-PZM007	WT	G				1527		3				X					X													
9																															
10																															
11																															
12																															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Data Package Required? (Y/N):	Bob Bertz	6/12/17	1601	[illegible]	6/12/17	1642				
Data Validation Required? (Y/N):	[illegible]	6/12/17	1840	[illegible]	6/12/17	1845				
If data package is required, attach data package checklist.	[illegible]	6/12/17	2300	[illegible]	6/12/17	2300	3.1	Y	N	Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Bob Bertz					
SIGNATURE of SAMPLER: [signature]	DATE Signed (MM/DD/YY): 06/12/17				

*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.

F-ALL-Q-020rev.06, 2-Feb-2007

Sample Condition Upon Receipt Pittsburgh

KEH

Pace Analytical

Client Name: EnviroAnalytics Project # 30221340

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 6 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.1 °C Correction Factor: 0.0 °C Final Temp: 3.1 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KH 6/13/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:	✓			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT		✓		5. Sample ID, time and date were on the bubble bag the vocs came in.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:	✓			8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Organic Samples checked for dechlorination:			✓	13.
Filtered volume received for Dissolved tests			✓	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.			✓ ✓	15.
exceptions: (VOA) coliform, TOC, O&G, Phenolics				Initial when completed KH / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		16.
Trip Blank Present: Trip Blank Custody Seals Present	✓ ✓			17.
Rad Aqueous Samples Screened > 0.5 mrem/hr			✓	Initial when completed: / Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 22, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
Sparrows Point Terminal
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Dear Mr. Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on June 14, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project:	Coke Oven GW Sampling
Pace Project No.:	30221566

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30221566001	**Trip Blank 1**	Water	06/14/17 00:01	06/14/17 23:00
30221566002	**CO104-PZMXXX**	Water	06/14/17 08:30	06/14/17 23:00
30221566003	**CO103-PZMXXX**	Water	06/14/17 09:30	06/14/17 23:00
30221566004	**CO102-PZMXXX**	Water	06/14/17 10:15	06/14/17 23:00
30221566005	**CO41-PZM036**	Water	06/14/17 11:35	06/14/17 23:00
30221566006	**CO41-PZM001**	Water	06/14/17 12:35	06/14/17 23:00
30221566007	**CO36-PZM043**	Water	06/14/17 13:55	06/14/17 23:00
30221566008	**CO36-PZM008**	Water	06/14/17 14:40	06/14/17 23:00
30221566009	**CO40-PZM008**	Water	06/14/17 15:48	06/14/17 23:00

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SAMPLE ANALYTE COUNT

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30221566001	**Trip Blank 1**	EPA 8260B	JAS	53	PASI-PA
30221566002	**CO104-PZMXXX**	EPA 8260B	JAS	53	PASI-PA
30221566003	**CO103-PZMXXX**	EPA 8260B	JAS	53	PASI-PA
30221566004	**CO102-PZMXXX**	EPA 8260B	JAS	53	PASI-PA
30221566005	**CO41-PZM036**	EPA 8260B	JAS	53	PASI-PA
30221566006	**CO41-PZM001**	EPA 8260B	JAS	53	PASI-PA
30221566007	**CO36-PZM043**	EPA 8260B	JAS	53	PASI-PA
30221566008	**CO36-PZM008**	EPA 8260B	JAS	53	PASI-PA
30221566009	**CO40-PZM008**	EPA 8260B	JAS	53	PASI-PA

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: Trip Blank 1 **Lab ID: 30221566001** Collected: 06/14/17 00:01 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/20/17 11:46	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/20/17 11:46	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 11:46	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/20/17 11:46	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/20/17 11:46	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/20/17 11:46	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/20/17 11:46	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/20/17 11:46	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/20/17 11:46	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/20/17 11:46	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/20/17 11:46	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/20/17 11:46	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/20/17 11:46	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/20/17 11:46	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/20/17 11:46	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/20/17 11:46	108-10-1	
Acetone	**9.4J**	ug/L	5.0	3.8	1		06/20/17 11:46	67-64-1	L2
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/20/17 11:46	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.35	1		06/20/17 11:46	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/20/17 11:46	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/20/17 11:46	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/20/17 11:46	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/20/17 11:46	74-83-9	CH,IH, L1
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/20/17 11:46	75-15-0	L2
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 11:46	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 11:46	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/20/17 11:46	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.33	1		06/20/17 11:46	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 11:46	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/20/17 11:46	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/20/17 11:46	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.21	1		06/20/17 11:46	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/20/17 11:46	74-88-4	CH,IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/20/17 11:46	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/20/17 11:46	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.39	1		06/20/17 11:46	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.18	1		06/20/17 11:46	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/20/17 11:46	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.29	1		06/20/17 11:46	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/20/17 11:46	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 11:46	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/20/17 11:46	108-05-4	IH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/20/17 11:46	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.1	1		06/20/17 11:46	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/20/17 11:46	156-59-2	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: Trip Blank 1 **Lab ID: 30221566001** Collected: 06/14/17 00:01 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/20/17 11:46	10061-01-5	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 11:46	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/20/17 11:46	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/20/17 11:46	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	109	%	78-117		1		06/20/17 11:46	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-128		1		06/20/17 11:46	17060-07-0	
Toluene-d8 (S)	98	%	59-140		1		06/20/17 11:46	2037-26-5	
Dibromofluoromethane (S)	101	%	66-132		1		06/20/17 11:46	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO104-PZMXXX **Lab ID: 30221566002** Collected: 06/14/17 08:30 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/20/17 13:49	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/20/17 13:49	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 13:49	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/20/17 13:49	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/20/17 13:49	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/20/17 13:49	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/20/17 13:49	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/20/17 13:49	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/20/17 13:49	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/20/17 13:49	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/20/17 13:49	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/20/17 13:49	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/20/17 13:49	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/20/17 13:49	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/20/17 13:49	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/20/17 13:49	108-10-1	
Acetone	**29.8**	ug/L	5.0	3.8	1		06/20/17 13:49	67-64-1	L2,M0, R1
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/20/17 13:49	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.35	1		06/20/17 13:49	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/20/17 13:49	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/20/17 13:49	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/20/17 13:49	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/20/17 13:49	74-83-9	CH,IH, L1,R1
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/20/17 13:49	75-15-0	L2
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 13:49	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 13:49	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/20/17 13:49	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.33	1		06/20/17 13:49	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 13:49	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/20/17 13:49	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/20/17 13:49	74-95-3	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.21	1		06/20/17 13:49	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/20/17 13:49	74-88-4	CH,IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/20/17 13:49	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/20/17 13:49	75-09-2	
Naphthalene	**2.0 U**	ug/L	2.0	0.39	1		06/20/17 13:49	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.18	1		06/20/17 13:49	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/20/17 13:49	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.29	1		06/20/17 13:49	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/20/17 13:49	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 13:49	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/20/17 13:49	108-05-4	IH,MH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/20/17 13:49	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1.1	1		06/20/17 13:49	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/20/17 13:49	156-59-2	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO104-PZMXXX **Lab ID: 30221566002** Collected: 06/14/17 08:30 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/20/17 13:49	10061-01-5	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 13:49	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/20/17 13:49	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/20/17 13:49	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	109	%	78-117		1		06/20/17 13:49	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-128		1		06/20/17 13:49	17060-07-0	
Toluene-d8 (S)	96	%	59-140		1		06/20/17 13:49	2037-26-5	
Dibromofluoromethane (S)	105	%	66-132		1		06/20/17 13:49	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO103-PZMXXX **Lab ID: 30221566003** Collected: 06/14/17 09:30 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 15:27	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 15:27	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 15:27	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 15:27	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 15:27	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	0.98	5		06/20/17 15:27	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 15:27	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.2	5		06/20/17 15:27	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 15:27	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 15:27	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 15:27	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	3.1	5		06/20/17 15:27	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 15:27	106-46-7	
2-Butanone (MEK)	ND	ug/L	25.0	27.6	5		06/20/17 15:27	78-93-3	IH
2-Hexanone	ND	ug/L	25.0	8.5	5		06/20/17 15:27	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	8.3	5		06/20/17 15:27	108-10-1	
Acetone	**50.6**	ug/L	25.0	19.0	5		06/20/17 15:27	67-64-1	L2
Acrylonitrile	**20.0 U**	ug/L	20.0	20.0	5		06/20/17 15:27	107-13-1	
Benzene	**10800**	ug/L	500	174	500		06/20/17 15:51	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 15:27	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 15:27	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	2.0	5		06/20/17 15:27	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	4.5	5		06/20/17 15:27	74-83-9	CH,IH, L1
Carbon disulfide	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 15:27	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 15:27	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.96	5		06/20/17 15:27	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 15:27	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 15:27	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 15:27	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 15:27	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 15:27	74-95-3	
Ethylbenzene	**41.7**	ug/L	5.0	1.1	5		06/20/17 15:27	100-41-4	
Iodomethane	ND	ug/L	5.0	8.8	5		06/20/17 15:27	74-88-4	CH,IL
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 15:27	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.9	5		06/20/17 15:27	75-09-2	
Naphthalene	**7210**	ug/L	1000	194	500		06/20/17 15:51	91-20-3	
Styrene	**8.1**	ug/L	5.0	0.90	5		06/20/17 15:27	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 15:27	127-18-4	
Toluene	**1680**	ug/L	5.0	1.4	5		06/20/17 15:27	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	2.5	5		06/20/17 15:27	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 15:27	75-69-4	
Vinyl acetate	ND	ug/L	10.0	8.7	5		06/20/17 15:27	108-05-4	IH
Vinyl chloride	**5.0 U**	ug/L	5.0	1.0	5		06/20/17 15:27	75-01-4	
Xylene (Total)	**769**	ug/L	5.0	5.4	5		06/20/17 15:27	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 15:27	156-59-2	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO103-PZMXXX **Lab ID: 30221566003** Collected: 06/14/17 09:30 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 15:27	10061-01-5	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 15:27	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	3.7	5		06/20/17 15:27	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	25.0	5		06/20/17 15:27	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	108	%	78-117		5		06/20/17 15:27	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-128		5		06/20/17 15:27	17060-07-0	
Toluene-d8 (S)	99	%	59-140		5		06/20/17 15:27	2037-26-5	
Dibromofluoromethane (S)	96	%	66-132		5		06/20/17 15:27	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO102-PZMXXX **Lab ID: 30221566004** Collected: 06/14/17 10:15 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 16:15	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 16:15	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 16:15	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 16:15	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 16:15	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	0.98	5		06/20/17 16:15	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 16:15	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.2	5		06/20/17 16:15	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 16:15	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 16:15	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 16:15	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	3.1	5		06/20/17 16:15	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 16:15	106-46-7	
2-Butanone (MEK)	ND	ug/L	25.0	27.6	5		06/20/17 16:15	78-93-3	IH
2-Hexanone	ND	ug/L	25.0	8.5	5		06/20/17 16:15	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	8.3	5		06/20/17 16:15	108-10-1	
Acetone	ND	ug/L	25.0	19.0	5		06/20/17 16:15	67-64-1	L2
Acrylonitrile	**20.0 U**	ug/L	20.0	20.0	5		06/20/17 16:15	107-13-1	
Benzene	**11900**	ug/L	500	174	500		06/20/17 16:40	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 16:15	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 16:15	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	2.0	5		06/20/17 16:15	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	4.5	5		06/20/17 16:15	74-83-9	CH,IH, L1
Carbon disulfide	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 16:15	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 16:15	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.96	5		06/20/17 16:15	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 16:15	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 16:15	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 16:15	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 16:15	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 16:15	74-95-3	
Ethylbenzene	**20.8**	ug/L	5.0	1.1	5		06/20/17 16:15	100-41-4	
Iodomethane	ND	ug/L	5.0	8.8	5		06/20/17 16:15	74-88-4	CH,IL
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 16:15	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.9	5		06/20/17 16:15	75-09-2	
Naphthalene	**874**	ug/L	10.0	1.9	5		06/20/17 16:15	91-20-3	
Styrene	**6.3**	ug/L	5.0	0.90	5		06/20/17 16:15	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 16:15	127-18-4	
Toluene	**1220**	ug/L	5.0	1.4	5		06/20/17 16:15	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	2.5	5		06/20/17 16:15	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 16:15	75-69-4	
Vinyl acetate	ND	ug/L	10.0	8.7	5		06/20/17 16:15	108-05-4	IH
Vinyl chloride	**5.0 U**	ug/L	5.0	1.0	5		06/20/17 16:15	75-01-4	
Xylene (Total)	**240**	ug/L	5.0	5.4	5		06/20/17 16:15	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 16:15	156-59-2	L2

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO102-PZMXXX **Lab ID: 30221566004** Collected: 06/14/17 10:15 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 16:15	10061-01-5	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 16:15	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	3.7	5		06/20/17 16:15	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	25.0	5		06/20/17 16:15	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	102	%	78-117		5		06/20/17 16:15	460-00-4	
1,2-Dichloroethane-d4 (S)	90	%	70-128		5		06/20/17 16:15	17060-07-0	
Toluene-d8 (S)	98	%	59-140		5		06/20/17 16:15	2037-26-5	
Dibromofluoromethane (S)	90	%	66-132		5		06/20/17 16:15	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO41-PZM036 **Lab ID: 30221566005** Collected: 06/14/17 11:35 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 18:42	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 18:42	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 18:42	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 18:42	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 18:42	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	0.98	5		06/20/17 18:42	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 18:42	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.2	5		06/20/17 18:42	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 18:42	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 18:42	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 18:42	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	3.1	5		06/20/17 18:42	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 18:42	106-46-7	
2-Butanone (MEK)	ND	ug/L	25.0	27.6	5		06/20/17 18:42	78-93-3	IH
2-Hexanone	ND	ug/L	25.0	8.5	5		06/20/17 18:42	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	8.3	5		06/20/17 18:42	108-10-1	
Acetone	ND	ug/L	25.0	19.0	5		06/20/17 18:42	67-64-1	L2
Acrylonitrile	**20.0 U**	ug/L	20.0	20.0	5		06/20/17 18:42	107-13-1	
Benzene	**47100**	ug/L	500	174	500		06/20/17 19:06	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 18:42	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 18:42	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	2.0	5		06/20/17 18:42	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	4.5	5		06/20/17 18:42	74-83-9	CH,IH, L1
Carbon disulfide	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 18:42	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 18:42	56-23-5	
Chlorobenzene	**1.8J**	ug/L	5.0	0.96	5		06/20/17 18:42	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 18:42	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 18:42	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 18:42	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 18:42	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 18:42	74-95-3	
Ethylbenzene	**605**	ug/L	5.0	1.1	5		06/20/17 18:42	100-41-4	
Iodomethane	ND	ug/L	5.0	8.8	5		06/20/17 18:42	74-88-4	CH,IL
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 18:42	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.9	5		06/20/17 18:42	75-09-2	
Naphthalene	**239**	ug/L	10.0	1.9	5		06/20/17 18:42	91-20-3	
Styrene	**263**	ug/L	5.0	0.90	5		06/20/17 18:42	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 18:42	127-18-4	
Toluene	**21600**	ug/L	500	145	500		06/20/17 19:06	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	2.5	5		06/20/17 18:42	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 18:42	75-69-4	
Vinyl acetate	ND	ug/L	10.0	8.7	5		06/20/17 18:42	108-05-4	IH
Vinyl chloride	**5.0 U**	ug/L	5.0	1.0	5		06/20/17 18:42	75-01-4	
Xylene (Total)	**9420**	ug/L	500	536	500		06/20/17 19:06	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 18:42	156-59-2	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO41-PZM036 **Lab ID: 30221566005** Collected: 06/14/17 11:35 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 18:42	10061-01-5	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 18:42	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	3.7	5		06/20/17 18:42	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	25.0	5		06/20/17 18:42	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	109	%	78-117		5		06/20/17 18:42	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-128		5		06/20/17 18:42	17060-07-0	
Toluene-d8 (S)	102	%	59-140		5		06/20/17 18:42	2037-26-5	
Dibromofluoromethane (S)	92	%	66-132		5		06/20/17 18:42	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO41-PZM001 **Lab ID: 30221566006** Collected: 06/14/17 12:35 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 17:04	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 17:04	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 17:04	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 17:04	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 17:04	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	0.98	5		06/20/17 17:04	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 17:04	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.2	5		06/20/17 17:04	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 17:04	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 17:04	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 17:04	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	3.1	5		06/20/17 17:04	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 17:04	106-46-7	
2-Butanone (MEK)	ND	ug/L	25.0	27.6	5		06/20/17 17:04	78-93-3	IH
2-Hexanone	ND	ug/L	25.0	8.5	5		06/20/17 17:04	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	8.3	5		06/20/17 17:04	108-10-1	
Acetone	ND	ug/L	25.0	19.0	5		06/20/17 17:04	67-64-1	L2
Acrylonitrile	**20.0 U**	ug/L	20.0	20.0	5		06/20/17 17:04	107-13-1	
Benzene	**1220**	ug/L	5.0	1.7	5		06/20/17 17:04	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 17:04	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 17:04	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	2.0	5		06/20/17 17:04	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	4.5	5		06/20/17 17:04	74-83-9	CH,IH, L1
Carbon disulfide	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 17:04	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 17:04	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.96	5		06/20/17 17:04	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 17:04	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 17:04	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 17:04	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 17:04	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 17:04	74-95-3	
Ethylbenzene	**23.2**	ug/L	5.0	1.1	5		06/20/17 17:04	100-41-4	
Iodomethane	ND	ug/L	5.0	8.8	5		06/20/17 17:04	74-88-4	CH,IL
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 17:04	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.9	5		06/20/17 17:04	75-09-2	
Naphthalene	**18.9**	ug/L	10.0	1.9	5		06/20/17 17:04	91-20-3	
Styrene	**1.1J**	ug/L	5.0	0.90	5		06/20/17 17:04	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 17:04	127-18-4	
Toluene	**801**	ug/L	5.0	1.4	5		06/20/17 17:04	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	2.5	5		06/20/17 17:04	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 17:04	75-69-4	
Vinyl acetate	ND	ug/L	10.0	8.7	5		06/20/17 17:04	108-05-4	IH
Vinyl chloride	**5.0 U**	ug/L	5.0	1.0	5		06/20/17 17:04	75-01-4	
Xylene (Total)	**238**	ug/L	5.0	5.4	5		06/20/17 17:04	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 17:04	156-59-2	L2

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO41-PZM001 **Lab ID: 30221566006** Collected: 06/14/17 12:35 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 17:04	10061-01-5	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 17:04	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	3.7	5		06/20/17 17:04	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	25.0	5		06/20/17 17:04	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	106	%	78-117		5		06/20/17 17:04	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-128		5		06/20/17 17:04	17060-07-0	
Toluene-d8 (S)	96	%	59-140		5		06/20/17 17:04	2037-26-5	
Dibromofluoromethane (S)	95	%	66-132		5		06/20/17 17:04	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO36-PZM043 **Lab ID: 30221566007** Collected: 06/14/17 13:55 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 17:53	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 17:53	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 17:53	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 17:53	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 17:53	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	0.98	5		06/20/17 17:53	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 17:53	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.2	5		06/20/17 17:53	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 17:53	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 17:53	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 17:53	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	3.1	5		06/20/17 17:53	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 17:53	106-46-7	
2-Butanone (MEK)	ND	ug/L	25.0	27.6	5		06/20/17 17:53	78-93-3	IH
2-Hexanone	ND	ug/L	25.0	8.5	5		06/20/17 17:53	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	8.3	5		06/20/17 17:53	108-10-1	
Acetone	ND	ug/L	25.0	19.0	5		06/20/17 17:53	67-64-1	L2
Acrylonitrile	**20.0 U**	ug/L	20.0	20.0	5		06/20/17 17:53	107-13-1	
Benzene	**17100**	ug/L	500	174	500		06/20/17 18:18	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 17:53	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 17:53	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	2.0	5		06/20/17 17:53	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	4.5	5		06/20/17 17:53	74-83-9	CH,IH, L1
Carbon disulfide	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 17:53	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 17:53	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.96	5		06/20/17 17:53	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 17:53	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 17:53	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 17:53	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 17:53	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 17:53	74-95-3	
Ethylbenzene	**31.9**	ug/L	5.0	1.1	5		06/20/17 17:53	100-41-4	
Iodomethane	ND	ug/L	5.0	8.8	5		06/20/17 17:53	74-88-4	CH,IL
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 17:53	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.9	5		06/20/17 17:53	75-09-2	
Naphthalene	**538**	ug/L	10.0	1.9	5		06/20/17 17:53	91-20-3	
Styrene	**7.6**	ug/L	5.0	0.90	5		06/20/17 17:53	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 17:53	127-18-4	
Toluene	**2270**	ug/L	500	145	500		06/20/17 18:18	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	2.5	5		06/20/17 17:53	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 17:53	75-69-4	
Vinyl acetate	ND	ug/L	10.0	8.7	5		06/20/17 17:53	108-05-4	IH
Vinyl chloride	**5.0 U**	ug/L	5.0	1.0	5		06/20/17 17:53	75-01-4	
Xylene (Total)	**553**	ug/L	5.0	5.4	5		06/20/17 17:53	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 17:53	156-59-2	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO36-PZM043 **Lab ID: 30221566007** Collected: 06/14/17 13:55 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 17:53	10061-01-5	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 17:53	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	3.7	5		06/20/17 17:53	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	25.0	5		06/20/17 17:53	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	107	%	78-117		5		06/20/17 17:53	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-128		5		06/20/17 17:53	17060-07-0	
Toluene-d8 (S)	101	%	59-140		5		06/20/17 17:53	2037-26-5	
Dibromofluoromethane (S)	93	%	66-132		5		06/20/17 17:53	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO36-PZM008 **Lab ID: 30221566008** Collected: 06/14/17 14:40 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 19:31	630-20-6	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 19:31	71-55-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 19:31	79-34-5	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 19:31	79-00-5	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 19:31	75-34-3	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	0.98	5		06/20/17 19:31	75-35-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 19:31	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.2	5		06/20/17 19:31	96-12-8	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 19:31	106-93-4	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 19:31	95-50-1	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 19:31	107-06-2	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	3.1	5		06/20/17 19:31	78-87-5	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 19:31	106-46-7	
2-Butanone (MEK)	ND	ug/L	25.0	27.6	5		06/20/17 19:31	78-93-3	IH
2-Hexanone	ND	ug/L	25.0	8.5	5		06/20/17 19:31	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	8.3	5		06/20/17 19:31	108-10-1	
Acetone	ND	ug/L	25.0	19.0	5		06/20/17 19:31	67-64-1	L2
Acrylonitrile	**20.0 U**	ug/L	20.0	20.0	5		06/20/17 19:31	107-13-1	
Benzene	**13100**	ug/L	500	174	500		06/20/17 19:55	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 19:31	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 19:31	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	2.0	5		06/20/17 19:31	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	4.5	5		06/20/17 19:31	74-83-9	CH,IH, L1
Carbon disulfide	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 19:31	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 19:31	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.96	5		06/20/17 19:31	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 19:31	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 19:31	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 19:31	74-87-3	
Dibromochloromethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 19:31	124-48-1	
Dibromomethane	**5.0 U**	ug/L	5.0	2.2	5		06/20/17 19:31	74-95-3	
Ethylbenzene	**58.3**	ug/L	5.0	1.1	5		06/20/17 19:31	100-41-4	
Iodomethane	ND	ug/L	5.0	8.8	5		06/20/17 19:31	74-88-4	CH,IL
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 19:31	1634-04-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.9	5		06/20/17 19:31	75-09-2	
Naphthalene	**440**	ug/L	10.0	1.9	5		06/20/17 19:31	91-20-3	
Styrene	**16.1**	ug/L	5.0	0.90	5		06/20/17 19:31	100-42-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.7	5		06/20/17 19:31	127-18-4	
Toluene	**3270**	ug/L	500	145	500		06/20/17 19:55	108-88-3	
Trichloroethene	**5.0 U**	ug/L	5.0	2.5	5		06/20/17 19:31	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 19:31	75-69-4	
Vinyl acetate	ND	ug/L	10.0	8.7	5		06/20/17 19:31	108-05-4	IH
Vinyl chloride	**5.0 U**	ug/L	5.0	1.0	5		06/20/17 19:31	75-01-4	
Xylene (Total)	**1150**	ug/L	5.0	5.4	5		06/20/17 19:31	1330-20-7	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	2.4	5		06/20/17 19:31	156-59-2	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO36-PZM008 **Lab ID: 30221566008** Collected: 06/14/17 14:40 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 19:31	10061-01-5	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 19:31	156-60-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	3.7	5		06/20/17 19:31	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	25.0	5		06/20/17 19:31	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	110	%	78-117		5		06/20/17 19:31	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	70-128		5		06/20/17 19:31	17060-07-0	
Toluene-d8 (S)	98	%	59-140		5		06/20/17 19:31	2037-26-5	
Dibromofluoromethane (S)	91	%	66-132		5		06/20/17 19:31	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO40-PZM008 **Lab ID: 30221566009** Collected: 06/14/17 15:48 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.23	1		06/20/17 14:38	630-20-6	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.22	1		06/20/17 14:38	71-55-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 14:38	79-34-5	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.45	1		06/20/17 14:38	79-00-5	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.34	1		06/20/17 14:38	75-34-3	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.20	1		06/20/17 14:38	75-35-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.41	1		06/20/17 14:38	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.43	1		06/20/17 14:38	96-12-8	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.48	1		06/20/17 14:38	106-93-4	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.37	1		06/20/17 14:38	95-50-1	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.36	1		06/20/17 14:38	107-06-2	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.62	1		06/20/17 14:38	78-87-5	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.44	1		06/20/17 14:38	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	5.5	1		06/20/17 14:38	78-93-3	IH
2-Hexanone	ND	ug/L	5.0	1.7	1		06/20/17 14:38	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1.7	1		06/20/17 14:38	108-10-1	
Acetone	ND	ug/L	5.0	3.8	1		06/20/17 14:38	67-64-1	L2
Acrylonitrile	**4.0 U**	ug/L	4.0	4.0	1		06/20/17 14:38	107-13-1	
Benzene	**21.6**	ug/L	1.0	0.35	1		06/20/17 14:38	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.56	1		06/20/17 14:38	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.43	1		06/20/17 14:38	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.40	1		06/20/17 14:38	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.90	1		06/20/17 14:38	74-83-9	CH,IH, L1
Carbon disulfide	**1.0 U**	ug/L	1.0	0.25	1		06/20/17 14:38	75-15-0	L2
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 14:38	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 14:38	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.42	1		06/20/17 14:38	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.33	1		06/20/17 14:38	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 14:38	74-87-3	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.35	1		06/20/17 14:38	124-48-1	
Dibromomethane	**1.0 U**	ug/L	1.0	0.44	1		06/20/17 14:38	74-95-3	
Ethylbenzene	**0.31J**	ug/L	1.0	0.21	1		06/20/17 14:38	100-41-4	
Iodomethane	ND	ug/L	1.0	1.8	1		06/20/17 14:38	74-88-4	CH,IL
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.27	1		06/20/17 14:38	1634-04-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.59	1		06/20/17 14:38	75-09-2	
Naphthalene	**8.0**	ug/L	2.0	0.39	1		06/20/17 14:38	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.18	1		06/20/17 14:38	100-42-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.33	1		06/20/17 14:38	127-18-4	
Toluene	**1.2**	ug/L	1.0	0.29	1		06/20/17 14:38	108-88-3	
Trichloroethene	**1.0 U**	ug/L	1.0	0.50	1		06/20/17 14:38	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 14:38	75-69-4	
Vinyl acetate	ND	ug/L	2.0	1.7	1		06/20/17 14:38	108-05-4	IH
Vinyl chloride	**1.0 U**	ug/L	1.0	0.21	1		06/20/17 14:38	75-01-4	
Xylene (Total)	**3.5**	ug/L	1.0	1.1	1		06/20/17 14:38	1330-20-7	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.48	1		06/20/17 14:38	156-59-2	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Sample: CO40-PZM008 **Lab ID: 30221566009** Collected: 06/14/17 15:48 Received: 06/14/17 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.37	1		06/20/17 14:38	10061-01-5	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 14:38	156-60-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.74	1		06/20/17 14:38	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	5.0	1		06/20/17 14:38	110-57-6	IL
Surrogates									
4-Bromofluorobenzene (S)	106	%	78-117		1		06/20/17 14:38	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-128		1		06/20/17 14:38	17060-07-0	
Toluene-d8 (S)	95	%	59-140		1		06/20/17 14:38	2037-26-5	
Dibromofluoromethane (S)	101	%	66-132		1		06/20/17 14:38	1868-53-7	

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QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

QC Batch: 262449 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30221566001, 30221566002, 30221566003, 30221566004, 30221566005, 30221566006, 30221566007, 30221566008, 30221566009

METHOD BLANK: 1292566 | Matrix: Water
Associated Lab Samples: 30221566001, 30221566002, 30221566003, 30221566004, 30221566005, 30221566006, 30221566007, 30221566008, 30221566009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.23	06/20/17 11:22	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.22	06/20/17 11:22	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.19	06/20/17 11:22	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.45	06/20/17 11:22	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.34	06/20/17 11:22	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.20	06/20/17 11:22	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.41	06/20/17 11:22	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.43	06/20/17 11:22	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.48	06/20/17 11:22	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.37	06/20/17 11:22	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.36	06/20/17 11:22	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.62	06/20/17 11:22	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.44	06/20/17 11:22	
2-Butanone (MEK)	ug/L	10.0 U	10.0	5.5	06/20/17 11:22	IH
2-Hexanone	ug/L	10.0 U	10.0	1.7	06/20/17 11:22	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	1.7	06/20/17 11:22	
Acetone	ug/L	10.0 U	10.0	3.8	06/20/17 11:22	
Acrylonitrile	ug/L	4.0 U	4.0	4.0	06/20/17 11:22	
Benzene	ug/L	1.0 U	1.0	0.35	06/20/17 11:22	
Bromochloromethane	ug/L	1.0 U	1.0	0.56	06/20/17 11:22	
Bromodichloromethane	ug/L	1.0 U	1.0	0.43	06/20/17 11:22	
Bromoform	ug/L	1.0 U	1.0	0.40	06/20/17 11:22	
Bromomethane	ug/L	1.0 U	1.0	0.90	06/20/17 11:22	CH,IH
Carbon disulfide	ug/L	1.0 U	1.0	0.25	06/20/17 11:22	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.32	06/20/17 11:22	
Chlorobenzene	ug/L	1.0 U	1.0	0.19	06/20/17 11:22	
Chloroethane	ug/L	1.0 U	1.0	0.42	06/20/17 11:22	
Chloroform	ug/L	1.0 U	1.0	0.33	06/20/17 11:22	
Chloromethane	ug/L	1.0 U	1.0	0.32	06/20/17 11:22	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.48	06/20/17 11:22	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.37	06/20/17 11:22	
Dibromochloromethane	ug/L	1.0 U	1.0	0.35	06/20/17 11:22	
Dibromomethane	ug/L	1.0 U	1.0	0.44	06/20/17 11:22	
Ethylbenzene	ug/L	1.0 U	1.0	0.21	06/20/17 11:22	
Iodomethane	ug/L	50.0 U	50.0	1.8	06/20/17 11:22	CH,IL
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.27	06/20/17 11:22	
Methylene Chloride	ug/L	1.0 U	1.0	0.59	06/20/17 11:22	
Naphthalene	ug/L	2.0 U	2.0	0.39	06/20/17 11:22	
Styrene	ug/L	1.0 U	1.0	0.18	06/20/17 11:22	
Tetrachloroethene	ug/L	1.0 U	1.0	0.33	06/20/17 11:22	

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QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

METHOD BLANK: 1292566 Matrix: Water

Associated Lab Samples: 30221566001, 30221566002, 30221566003, 30221566004, 30221566005, 30221566006, 30221566007, 30221566008, 30221566009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.29	06/20/17 11:22	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.32	06/20/17 11:22	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.74	06/20/17 11:22	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	5.0	06/20/17 11:22	IL
Trichloroethene	ug/L	1.0 U	1.0	0.50	06/20/17 11:22	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.32	06/20/17 11:22	
Vinyl acetate	ug/L	10.0 U	10.0	1.7	06/20/17 11:22	IH
Vinyl chloride	ug/L	1.0 U	1.0	0.21	06/20/17 11:22	
Xylene (Total)	ug/L	3.0 U	3.0	1.1	06/20/17 11:22	
1,2-Dichloroethane-d4 (S)	%	94	70-128		06/20/17 11:22	
4-Bromofluorobenzene (S)	%	103	78-117		06/20/17 11:22	
Dibromofluoromethane (S)	%	97	66-132		06/20/17 11:22	
Toluene-d8 (S)	%	99	59-140		06/20/17 11:22	

LABORATORY CONTROL SAMPLE: 1292567

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.5	107	72-118	
1,1,1-Trichloroethane	ug/L	20	17.4	87	79-125	
1,1,2,2-Tetrachloroethane	ug/L	20	23.3	116	64-130	
1,1,2-Trichloroethane	ug/L	20	21.2	106	78-118	
1,1-Dichloroethane	ug/L	20	16.9	85	77-124	
1,1-Dichloroethene	ug/L	20	15.6	78	74-127	
1,2,3-Trichloropropane	ug/L	20	23.2	116	70-123	
1,2-Dibromo-3-chloropropane	ug/L	20	22.2	111	53-133	
1,2-Dibromoethane (EDB)	ug/L	20	21.7	108	69-126	
1,2-Dichlorobenzene	ug/L	20	21.2	106	83-117	
1,2-Dichloroethane	ug/L	20	16.3	81	73-118	
1,2-Dichloropropane	ug/L	20	16.9	85	77-126	
1,4-Dichlorobenzene	ug/L	20	21.9	109	83-119	
2-Butanone (MEK)	ug/L	20	21.0	105	55-134	IH
2-Hexanone	ug/L	20	19.4	97	78-156	
4-Methyl-2-pentanone (MIBK)	ug/L	20	17.7	89	63-121	
Acetone	ug/L	20	8.3J	42	51-144	L2
Acrylonitrile	ug/L	20	13.8	69	39-170	
Benzene	ug/L	20	17.6	88	80-113	
Bromochloromethane	ug/L	20	18.3	91	78-114	
Bromodichloromethane	ug/L	20	19.9	99	78-121	
Bromoform	ug/L	20	22.6	113	71-130	
Bromomethane	ug/L	20	43.7	218	58-154	CH,IH
Carbon disulfide	ug/L	20	12.8	64	66-152	L2
Carbon tetrachloride	ug/L	20	17.2	86	69-133	
Chlorobenzene	ug/L	20	20.1	101	85-116	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

LABORATORY CONTROL SAMPLE: 1292567

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	18.7	94	76-136	
Chloroform	ug/L	20	17.7	88	76-118	
Chloromethane	ug/L	20	21.0	105	67-148	
cis-1,2-Dichloroethene	ug/L	20	16.3	82	77-126	
cis-1,3-Dichloropropene	ug/L	20	18.8	94	75-119	
Dibromochloromethane	ug/L	20	22.1	111	66-131	
Dibromomethane	ug/L	20	19.1	96	76-121	
Ethylbenzene	ug/L	20	19.6	98	80-115	
Iodomethane	ug/L	20	22.6J	113	10-149	CH,IL
Methyl-tert-butyl ether	ug/L	20	16.8	84	82-126	
Methylene Chloride	ug/L	20	14.4	72	61-142	
Naphthalene	ug/L	20	22.8	114	61-139	
Styrene	ug/L	20	21.0	105	84-120	
Tetrachloroethene	ug/L	20	19.4	97	82-120	
Toluene	ug/L	20	18.9	94	82-116	
trans-1,2-Dichloroethene	ug/L	20	16.3	82	76-125	
trans-1,3-Dichloropropene	ug/L	20	20.6	103	73-119	
trans-1,4-Dichloro-2-butene	ug/L	20	13.1	65	27-116	IL
Trichloroethene	ug/L	20	18.8	94	84-116	
Trichlorofluoromethane	ug/L	20	19.8	99	59-138	
Vinyl acetate	ug/L	20	19.8	99	10-175	IH
Vinyl chloride	ug/L	20	21.0	105	63-133	
Xylene (Total)	ug/L	60	60.3	101	82-115	
1,2-Dichloroethane-d4 (S)	%			90	70-128	
4-Bromofluorobenzene (S)	%			102	78-117	
Dibromofluoromethane (S)	%			102	66-132	
Toluene-d8 (S)	%			101	59-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1292796 1292797

Parameter	Units	30221566002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	20	20	19.1	20.0	96	100	52-120	4	30	
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	16.9	17.8	85	89	54-140	5	30	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	20.3	22.6	102	113	54-124	11	30	
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	18.1	19.2	91	96	58-120	6	30	
1,1-Dichloroethane	ug/L	1.0 U	20	20	14.9	16.9	75	84	55-133	12	30	
1,1-Dichloroethene	ug/L	1.0 U	20	20	15.0	15.7	75	79	48-141	5	30	
1,2,3-Trichloropropane	ug/L	1.0 U	20	20	21.2	22.6	106	113	51-116	6	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	21.1	22.1	105	111	23-126	5	30	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	20	20	18.9	19.5	94	98	58-115	3	30	
1,2-Dichlorobenzene	ug/L	1.0 U	20	20	19.1	20.8	96	104	57-124	8	30	
1,2-Dichloroethane	ug/L	1.0 U	20	20	14.8	16.4	74	82	58-123	10	30	
1,2-Dichloropropane	ug/L	1.0 U	20	20	15.0	16.2	75	81	55-125	7	30	

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.

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1292796 1292797

Parameter	Units	30221566002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	1.0 U	20	20	19.7	20.5	99	102	61-111	4	30	
2-Butanone (MEK)	ug/L	ND	20	20	18.5	19.1	92	96	43-128	4	30	IH
2-Hexanone	ug/L	ND	20	20	16.9	17.7	85	89	43-135	5	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	15.6	17.6	78	88	47-123	12	30	
Acetone	ug/L	29.8	20	20	19.1	39.6	-53	49	10-150	70	30	ML,R1
Acrylonitrile	ug/L	4.0 U	20	20	14.4	14.9	72	75	31-182	3	30	
Benzene	ug/L	1.0 U	20	20	16.9	18.2	85	91	63-123	7	30	
Bromochloromethane	ug/L	1.0 U	20	20	17.6	18.9	88	95	42-149	7	30	
Bromodichloromethane	ug/L	1.0 U	20	20	16.8	18.7	84	93	55-127	11	30	
Bromoform	ug/L	1.0 U	20	20	19.9	21.6	99	108	44-131	8	30	
Bromomethane	ug/L	1.0 U	20	20	10.2	18.2	51	91	10-149	56	30	CH,IH, R1
Carbon disulfide	ug/L	1.0 U	20	20	10.2	11.5	51	58	47-158	13	30	
Carbon tetrachloride	ug/L	1.0 U	20	20	16.7	16.7	83	84	44-155	0	30	
Chlorobenzene	ug/L	1.0 U	20	20	18.1	18.8	91	94	57-121	4	30	
Chloroethane	ug/L	1.0 U	20	20	19.5	21.8	98	109	57-156	11	30	
Chloroform	ug/L	1.0 U	20	20	15.4	17.5	77	88	56-132	13	30	
Chloromethane	ug/L	1.0 U	20	20	17.5	20.3	88	101	42-163	15	30	
cis-1,2-Dichloroethene	ug/L	1.0 U	20	20	14.8	16.5	74	82	46-139	10	30	
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	15.5	17.6	78	88	55-119	13	30	
Dibromochloromethane	ug/L	1.0 U	20	20	19.1	20.7	96	103	52-129	8	30	
Dibromomethane	ug/L	1.0 U	20	20	17.6	18.9	88	94	52-120	7	30	
Ethylbenzene	ug/L	1.0 U	20	20	17.1	18.5	85	93	70-120	8	30	
Iodomethane	ug/L	ND	20	20	8.2J	12.4J	41	62	10-177		30	CH,IL
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	13.8	15.4	69	77	63-143	11	30	
Methylene Chloride	ug/L	1.0 U	20	20	12.5	12.9	62	65	38-134	4	30	
Naphthalene	ug/L	2.0 U	20	20	20.3	21.4	101	107	55-122	6	30	
Styrene	ug/L	1.0 U	20	20	18.9	19.0	94	95	49-135	1	30	
Tetrachloroethene	ug/L	1.0 U	20	20	18.8	18.0	94	90	53-125	4	30	
Toluene	ug/L	1.0 U	20	20	17.8	18.3	89	91	66-124	3	30	
trans-1,2-Dichloroethene	ug/L	1.0 U	20	20	14.0	15.9	70	80	52-136	13	30	
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	17.2	18.2	86	91	54-118	5	30	
trans-1,4-Dichloro-2-butene	ug/L	ND	20	20	10	10.5	50	52	19-116	5	30	IL
Trichloroethene	ug/L	1.0 U	20	20	17.3	19.3	86	96	50-127	11	30	
Trichlorofluoromethane	ug/L	1.0 U	20	20	20.5	22.0	103	110	63-167	7	30	
Vinyl acetate	ug/L	ND	20	20	16.3	17.2	81	86	10-49	6	30	IH,MH
Vinyl chloride	ug/L	1.0 U	20	20	18.9	20.5	95	103	54-149	8	30	
Xylene (Total)	ug/L	ND	60	60	55.8	56.2	93	94	68-123	1	30	
1,2-Dichloroethane-d4 (S)	%						90	94	70-128			
4-Bromofluorobenzene (S)	%						105	107	78-117			
Dibromofluoromethane (S)	%						97	98	66-132			
Toluene-d8 (S)	%						99	100	59-140			

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.

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QUALIFIERS

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

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.

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
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.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven GW Sampling
Pace Project No.: 30221566

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30221566001	**Trip Blank 1**	EPA 8260B	262449		
30221566002	**CO104-PZMXXX**	EPA 8260B	262449		
30221566003	**CO103-PZMXXX**	EPA 8260B	262449		
30221566004	**CO102-PZMXXX**	EPA 8260B	262449		
30221566005	**CO41-PZM036**	EPA 8260B	262449		
30221566006	**CO41-PZM001**	EPA 8260B	262449		
30221566007	**CO36-PZM043**	EPA 8260B	262449		
30221566008	**CO36-PZM008**	EPA 8260B	262449		
30221566009	**CO40-PZM008**	EPA 8260B	262449		

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CHAIN-OF-CUS

The Chain-of-Custody is a LE

WO#: 30221566

30221566

Page: 1 of 1

Section A
Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone: 314-620-3056	Fax:
Requested Due Date/TAT:	5 days

Section B
Required Project Information:

Report To:	James Calenda
Copy To:	
PO Number:	
Project Name:	Coke Oven GW Sampling
Project Number:	170384-1-2

Section C
Invoice

Attention:	Laura Sargent
Company Name:	EnviroAnalytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Section D
Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	DI Water	Analysis Test Y/N	VOC/8260B	SVOC 8270D	DRO/8015B	GRO/8015B	METALS/6010C	Mercury/7471A or 7470A	Hexavalent Chromium/7196A	Total Cyanide/9012A	PCB/8082 (soil)		Oil and Grease/1664A (ac	Oil and Grease/9071B (soil)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank 1	WT	G			6/14/17			1				X						X													001
2	C0104-PZMxxx	WT	G				0830		3				X						X													002
3	C0103-PZMxxx	WT	G				0930		3				X						X													003
4	C0102-PZMxxx	WT	G				1015		3				X						X													004
5	C041-PZM036	WT	G				1135		3				X						X													005
6	C041-PZM001	WT	G				1235		3				X						X													006
7	C036-PZM043	WT	G				1355		3				X						X													007
8	C036-PZM008	WT	G				1440		3				X						X													008
9	C040-PZM008	WT	G				1540		3				X						X													009
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Data Package Required? (Y/N)	Bob Bentz	6/14/17	1553	Daniel Stillhammer Pace	6/14/17	1645				
Data Validation Required? (Y/N)	Daniel Stillhammer Pace	6/14/17	1916	[illegible]	6/14/17	2000				
If data package is required, attach data package checklist.	[illegible] Pace	6/14/17	2000	[illegible] Pace	6/14/17	2300	5.3	Y	N	Y

SAMPLER NAME AND SIGNATURE			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Bob Bentz					
SIGNATURE of SAMPLER:	[signature]	DATE Signed (MM/DD/YY): 06/14/17				

*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.

F-ALL-Q-020rev.06, 2-Feb-2007

30221566

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Sparrows Pt Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Tracking #: NA

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 7 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 5.3 °C Correction Factor: 0 °C Final Temp: 5.3 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: PC 6/14/17

Comments:	Yes	No	N/A		
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.	
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:		X		8.	
Sufficient Volume:	X			9.	
Correct Containers Used: -Pace Containers Used:	X X			10.	
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Organic Samples checked for dechlorination:			X	13.	
Filtered volume received for Dissolved tests			X	14.	
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.			X X	15.	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed PC	Date/time of preservation 6/14/17
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):	X			16.	
Trip Blank Present: Trip Blank Custody Seals Present	X X			17.	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: PC	Date: 6/14/17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 22, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
Sparrows Point Terminal
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Dear Mr. Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on June 13, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project:	Coke Oven GW Sampling
Pace Project No.:	30221463

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30221463001	**Trip Blank 1**	Water	06/13/17 00:01	06/13/17 22:20
30221463002	**CO57-PZP002**	Water	06/13/17 08:10	06/13/17 22:20
30221463003	**CO02-PZM006**	Water	06/13/17 09:24	06/13/17 22:20
30221463004	**CO93-PZMXXX**	Water	06/13/17 10:35	06/13/17 22:20
30221463005	**CO18-PZM006**	Water	06/13/17 11:55	06/13/17 22:20
30221463006	**CO101-PZMXXX**	Water	06/13/17 13:16	06/13/17 22:20
30221463007	**CO30-PZM15**	Water	06/13/17 14:28	06/13/17 22:20
30221463008	**CO30-PZM60**	Water	06/13/17 15:30	06/13/17 22:20

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SAMPLE ANALYTE COUNT

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30221463001	**Trip Blank 1**	EPA 8260B	MAK	53	PASI-PA
30221463002	**CO57-PZP002**	EPA 8260B	MAK	53	PASI-PA
30221463003	**CO02-PZM006**	EPA 8260B	MAK	53	PASI-PA
30221463004	**CO93-PZMXXX**	EPA 8260B	MAK	53	PASI-PA
30221463005	**CO18-PZM006**	EPA 8260B	MAK	53	PASI-PA
30221463006	**CO101-PZMXXX**	EPA 8260B	MAK	53	PASI-PA
30221463007	**CO30-PZM15**	EPA 8260B	MAK	53	PASI-PA
30221463008	**CO30-PZM60**	EPA 8260B	MAK	53	PASI-PA

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: Trip Blank 1 **Lab ID: 30221463001** Collected: 06/13/17 00:01 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**5.5J**	ug/L	5.0	2.9	1		06/20/17 16:33	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		06/20/17 16:33	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.18	1		06/20/17 16:33	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		06/20/17 16:33	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 16:33	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 16:33	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		06/20/17 16:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		06/20/17 16:33	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		06/20/17 16:33	75-15-0	L2
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 16:33	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 16:33	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		06/20/17 16:33	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		06/20/17 16:33	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 16:33	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		06/20/17 16:33	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		06/20/17 16:33	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		06/20/17 16:33	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		06/20/17 16:33	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 16:33	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		06/20/17 16:33	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		06/20/17 16:33	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		06/20/17 16:33	75-34-3	L2
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		06/20/17 16:33	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		06/20/17 16:33	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 16:33	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		06/20/17 16:33	156-60-5	L2
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		06/20/17 16:33	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 16:33	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 16:33	10061-02-6	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		06/20/17 16:33	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.26	1		06/20/17 16:33	591-78-6	L2
Iodomethane	ND	ug/L	1.0	4.6	1		06/20/17 16:33	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		06/20/17 16:33	75-09-2	L2
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		06/20/17 16:33	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 16:33	1634-04-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		06/20/17 16:33	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		06/20/17 16:33	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		06/20/17 16:33	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 16:33	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		06/20/17 16:33	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.11	1		06/20/17 16:33	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		06/20/17 16:33	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		06/20/17 16:33	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		06/20/17 16:33	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		06/20/17 16:33	75-69-4	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: Trip Blank 1 **Lab ID: 30221463001** Collected: 06/13/17 00:01 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		06/20/17 16:33	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.15	1		06/20/17 16:33	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 16:33	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.77	1		06/20/17 16:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	78-117		1		06/20/17 16:33	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-128		1		06/20/17 16:33	17060-07-0	
Toluene-d8 (S)	92	%	59-140		1		06/20/17 16:33	2037-26-5	
Dibromofluoromethane (S)	105	%	66-132		1		06/20/17 16:33	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO57-PZP002 **Lab ID: 30221463002** Collected: 06/13/17 08:10 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**14.9**	ug/L	5.0	2.9	1		06/20/17 20:33	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		06/20/17 20:33	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.18	1		06/20/17 20:33	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		06/20/17 20:33	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 20:33	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 20:33	75-25-2	
Bromomethane	**2.4**	ug/L	1.0	0.64	1		06/20/17 20:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		06/20/17 20:33	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		06/20/17 20:33	75-15-0	L2
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 20:33	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 20:33	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		06/20/17 20:33	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		06/20/17 20:33	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 20:33	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		06/20/17 20:33	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		06/20/17 20:33	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		06/20/17 20:33	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		06/20/17 20:33	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 20:33	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		06/20/17 20:33	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		06/20/17 20:33	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		06/20/17 20:33	75-34-3	L2
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		06/20/17 20:33	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		06/20/17 20:33	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 20:33	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		06/20/17 20:33	156-60-5	L2
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		06/20/17 20:33	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 20:33	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 20:33	10061-02-6	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		06/20/17 20:33	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.26	1		06/20/17 20:33	591-78-6	L2
Iodomethane	ND	ug/L	1.0	4.6	1		06/20/17 20:33	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		06/20/17 20:33	75-09-2	L2
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		06/20/17 20:33	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 20:33	1634-04-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		06/20/17 20:33	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		06/20/17 20:33	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		06/20/17 20:33	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 20:33	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		06/20/17 20:33	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.11	1		06/20/17 20:33	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		06/20/17 20:33	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		06/20/17 20:33	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		06/20/17 20:33	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		06/20/17 20:33	75-69-4	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO57-PZP002 **Lab ID: 30221463002** Collected: 06/13/17 08:10 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		06/20/17 20:33	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.15	1		06/20/17 20:33	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 20:33	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.77	1		06/20/17 20:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%	78-117		1		06/20/17 20:33	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-128		1		06/20/17 20:33	17060-07-0	
Toluene-d8 (S)	90	%	59-140		1		06/20/17 20:33	2037-26-5	
Dibromofluoromethane (S)	106	%	66-132		1		06/20/17 20:33	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO02-PZM006 **Lab ID: 30221463003** Collected: 06/13/17 09:24 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**38.0J**	ug/L	25.0	14.6	5		06/20/17 21:20	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		06/20/17 21:20	107-13-1	
Benzene	**191000**	ug/L	1000	178	1000		06/20/17 17:11	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		06/20/17 21:20	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		06/20/17 21:20	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		06/20/17 21:20	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		06/20/17 21:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		06/20/17 21:20	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 21:20	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		06/20/17 21:20	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		06/20/17 21:20	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 21:20	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 21:20	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		06/20/17 21:20	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		06/20/17 21:20	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		06/20/17 21:20	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 21:20	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 21:20	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		06/20/17 21:20	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 21:20	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		06/20/17 21:20	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		06/20/17 21:20	75-34-3	L2
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		06/20/17 21:20	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 21:20	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 21:20	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		06/20/17 21:20	156-60-5	L2
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		06/20/17 21:20	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		06/20/17 21:20	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		06/20/17 21:20	10061-02-6	
Ethylbenzene	**225**	ug/L	5.0	0.98	5		06/20/17 21:20	100-41-4	
2-Hexanone	ND	ug/L	25.0	1.3	5		06/20/17 21:20	591-78-6	L2
Iodomethane	ND	ug/L	5.0	23.2	5		06/20/17 21:20	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 21:20	75-09-2	L2
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		06/20/17 21:20	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		06/20/17 21:20	1634-04-4	
Naphthalene	**210**	ug/L	10.0	0.56	5		06/20/17 21:20	91-20-3	
Styrene	**5.5**	ug/L	5.0	0.81	5		06/20/17 21:20	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 21:20	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		06/20/17 21:20	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 21:20	127-18-4	
Toluene	**136**	ug/L	5.0	0.55	5		06/20/17 21:20	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		06/20/17 21:20	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 21:20	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 21:20	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		06/20/17 21:20	75-69-4	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO02-PZM006 **Lab ID: 30221463003** Collected: 06/13/17 09:24 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 21:20	96-18-4	
Vinyl acetate	ND	ug/L	10.0	0.74	5		06/20/17 21:20	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 21:20	75-01-4	
Xylene (Total)	**345**	ug/L	5.0	3.8	5		06/20/17 21:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%	78-117		5		06/20/17 21:20	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-128		5		06/20/17 21:20	17060-07-0	
Toluene-d8 (S)	92	%	59-140		5		06/20/17 21:20	2037-26-5	
Dibromofluoromethane (S)	106	%	66-132		5		06/20/17 21:20	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO93-PZMXXX **Lab ID: 30221463004** Collected: 06/13/17 10:35 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**42.0J**	ug/L	25.0	14.6	5		06/20/17 22:31	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		06/20/17 22:31	107-13-1	
Benzene	**230000**	ug/L	1000	178	1000		06/20/17 16:20	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		06/20/17 22:31	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		06/20/17 22:31	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		06/20/17 22:31	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		06/20/17 22:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		06/20/17 22:31	78-93-3	
Carbon disulfide	**15.1**	ug/L	5.0	1.1	5		06/20/17 22:31	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		06/20/17 22:31	56-23-5	
Chlorobenzene	**10**	ug/L	5.0	0.85	5		06/20/17 22:31	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 22:31	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 22:31	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		06/20/17 22:31	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		06/20/17 22:31	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		06/20/17 22:31	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 22:31	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 22:31	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		06/20/17 22:31	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:31	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		06/20/17 22:31	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		06/20/17 22:31	75-34-3	L2
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		06/20/17 22:31	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:31	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 22:31	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		06/20/17 22:31	156-60-5	L2
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		06/20/17 22:31	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		06/20/17 22:31	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		06/20/17 22:31	10061-02-6	
Ethylbenzene	**894**	ug/L	5.0	0.98	5		06/20/17 22:31	100-41-4	
2-Hexanone	ND	ug/L	25.0	1.3	5		06/20/17 22:31	591-78-6	L2
Iodomethane	ND	ug/L	5.0	23.2	5		06/20/17 22:31	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 22:31	75-09-2	L2
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		06/20/17 22:31	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		06/20/17 22:31	1634-04-4	
Naphthalene	**1480**	ug/L	10.0	0.56	5		06/20/17 22:31	91-20-3	
Styrene	**945**	ug/L	5.0	0.81	5		06/20/17 22:31	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 22:31	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		06/20/17 22:31	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 22:31	127-18-4	
Toluene	**50700**	ug/L	1000	110	1000		06/20/17 16:20	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		06/20/17 22:31	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 22:31	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:31	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		06/20/17 22:31	75-69-4	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO93-PZMXXX **Lab ID: 30221463004** Collected: 06/13/17 10:35 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 22:31	96-18-4	
Vinyl acetate	ND	ug/L	10.0	0.74	5		06/20/17 22:31	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 22:31	75-01-4	
Xylene (Total)	**10600**	ug/L	1000	769	1000		06/20/17 16:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%	78-117		5		06/20/17 22:31	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-128		5		06/20/17 22:31	17060-07-0	
Toluene-d8 (S)	92	%	59-140		5		06/20/17 22:31	2037-26-5	
Dibromofluoromethane (S)	107	%	66-132		5		06/20/17 22:31	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO18-PZM006 **Lab ID: 30221463005** Collected: 06/13/17 11:55 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**78.4**	ug/L	25.0	14.6	5		06/20/17 21:44	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		06/20/17 21:44	107-13-1	
Benzene	**365000**	ug/L	1000	178	1000		06/20/17 15:30	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		06/20/17 21:44	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		06/20/17 21:44	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		06/20/17 21:44	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		06/20/17 21:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		06/20/17 21:44	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 21:44	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		06/20/17 21:44	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		06/20/17 21:44	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 21:44	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 21:44	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		06/20/17 21:44	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		06/20/17 21:44	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		06/20/17 21:44	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 21:44	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 21:44	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		06/20/17 21:44	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 21:44	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		06/20/17 21:44	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		06/20/17 21:44	75-34-3	L2
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		06/20/17 21:44	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 21:44	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 21:44	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		06/20/17 21:44	156-60-5	L2
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		06/20/17 21:44	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		06/20/17 21:44	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		06/20/17 21:44	10061-02-6	
Ethylbenzene	**51.1**	ug/L	5.0	0.98	5		06/20/17 21:44	100-41-4	
2-Hexanone	ND	ug/L	25.0	1.3	5		06/20/17 21:44	591-78-6	L2
Iodomethane	ND	ug/L	5.0	23.2	5		06/20/17 21:44	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 21:44	75-09-2	L2
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		06/20/17 21:44	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		06/20/17 21:44	1634-04-4	
Naphthalene	**117**	ug/L	10.0	0.56	5		06/20/17 21:44	91-20-3	
Styrene	**1.8J**	ug/L	5.0	0.81	5		06/20/17 21:44	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 21:44	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		06/20/17 21:44	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 21:44	127-18-4	
Toluene	**20400**	ug/L	1000	110	1000		06/20/17 15:30	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		06/20/17 21:44	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 21:44	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 21:44	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		06/20/17 21:44	75-69-4	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO18-PZM006 **Lab ID: 30221463005** Collected: 06/13/17 11:55 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 21:44	96-18-4	
Vinyl acetate	ND	ug/L	10.0	0.74	5		06/20/17 21:44	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 21:44	75-01-4	
Xylene (Total)	**1310**	ug/L	5.0	3.8	5		06/20/17 21:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%	78-117		5		06/20/17 21:44	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-128		5		06/20/17 21:44	17060-07-0	
Toluene-d8 (S)	95	%	59-140		5		06/20/17 21:44	2037-26-5	
Dibromofluoromethane (S)	109	%	66-132		5		06/20/17 21:44	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO101-PZMXXX **Lab ID: 30221463006** Collected: 06/13/17 13:16 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**48.7J**	ug/L	25.0	14.6	5		06/20/17 22:07	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		06/20/17 22:07	107-13-1	
Benzene	**10400**	ug/L	1000	178	1000		06/20/17 15:55	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		06/20/17 22:07	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		06/20/17 22:07	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		06/20/17 22:07	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		06/20/17 22:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		06/20/17 22:07	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:07	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		06/20/17 22:07	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		06/20/17 22:07	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 22:07	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 22:07	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		06/20/17 22:07	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		06/20/17 22:07	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		06/20/17 22:07	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 22:07	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 22:07	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		06/20/17 22:07	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:07	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		06/20/17 22:07	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		06/20/17 22:07	75-34-3	L2
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		06/20/17 22:07	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:07	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 22:07	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		06/20/17 22:07	156-60-5	L2
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		06/20/17 22:07	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		06/20/17 22:07	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		06/20/17 22:07	10061-02-6	
Ethylbenzene	**4.0J**	ug/L	5.0	0.98	5		06/20/17 22:07	100-41-4	
2-Hexanone	ND	ug/L	25.0	1.3	5		06/20/17 22:07	591-78-6	L2
Iodomethane	ND	ug/L	5.0	23.2	5		06/20/17 22:07	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 22:07	75-09-2	L2
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		06/20/17 22:07	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		06/20/17 22:07	1634-04-4	
Naphthalene	**107**	ug/L	10.0	0.56	5		06/20/17 22:07	91-20-3	
Styrene	**5.0 U**	ug/L	5.0	0.81	5		06/20/17 22:07	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 22:07	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		06/20/17 22:07	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 22:07	127-18-4	
Toluene	**235**	ug/L	5.0	0.55	5		06/20/17 22:07	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		06/20/17 22:07	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 22:07	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:07	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		06/20/17 22:07	75-69-4	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO101-PZMXXX **Lab ID: 30221463006** Collected: 06/13/17 13:16 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 22:07	96-18-4	
Vinyl acetate	ND	ug/L	10.0	0.74	5		06/20/17 22:07	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 22:07	75-01-4	
Xylene (Total)	**41.5**	ug/L	5.0	3.8	5		06/20/17 22:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	78-117		5		06/20/17 22:07	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-128		5		06/20/17 22:07	17060-07-0	
Toluene-d8 (S)	90	%	59-140		5		06/20/17 22:07	2037-26-5	
Dibromofluoromethane (S)	104	%	66-132		5		06/20/17 22:07	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO30-PZM15 **Lab ID: 30221463007** Collected: 06/13/17 14:28 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**39.7J**	ug/L	25.0	14.6	5		06/20/17 22:55	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		06/20/17 22:55	107-13-1	
Benzene	**80900**	ug/L	1000	178	1000		06/20/17 16:46	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		06/20/17 22:55	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		06/20/17 22:55	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		06/20/17 22:55	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		06/20/17 22:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		06/20/17 22:55	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:55	75-15-0	L2
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		06/20/17 22:55	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		06/20/17 22:55	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		06/20/17 22:55	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 22:55	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		06/20/17 22:55	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		06/20/17 22:55	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		06/20/17 22:55	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		06/20/17 22:55	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 22:55	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		06/20/17 22:55	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:55	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		06/20/17 22:55	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		06/20/17 22:55	75-34-3	L2
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		06/20/17 22:55	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:55	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		06/20/17 22:55	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		06/20/17 22:55	156-60-5	L2
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		06/20/17 22:55	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		06/20/17 22:55	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		06/20/17 22:55	10061-02-6	
Ethylbenzene	**80.3**	ug/L	5.0	0.98	5		06/20/17 22:55	100-41-4	
2-Hexanone	ND	ug/L	25.0	1.3	5		06/20/17 22:55	591-78-6	L2
Iodomethane	ND	ug/L	5.0	23.2	5		06/20/17 22:55	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		06/20/17 22:55	75-09-2	L2
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		06/20/17 22:55	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		06/20/17 22:55	1634-04-4	
Naphthalene	**1860J**	ug/L	2000	111	1000		06/20/17 16:46	91-20-3	
Styrene	**12.5**	ug/L	5.0	0.81	5		06/20/17 22:55	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 22:55	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		06/20/17 22:55	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		06/20/17 22:55	127-18-4	
Toluene	**4540**	ug/L	1000	110	1000		06/20/17 16:46	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		06/20/17 22:55	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		06/20/17 22:55	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		06/20/17 22:55	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		06/20/17 22:55	75-69-4	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO30-PZM15 **Lab ID: 30221463007** Collected: 06/13/17 14:28 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		06/20/17 22:55	96-18-4	
Vinyl acetate	ND	ug/L	10.0	0.74	5		06/20/17 22:55	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		06/20/17 22:55	75-01-4	
Xylene (Total)	**1140**	ug/L	5.0	3.8	5		06/20/17 22:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	111	%	78-117		5		06/20/17 22:55	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-128		5		06/20/17 22:55	17060-07-0	
Toluene-d8 (S)	90	%	59-140		5		06/20/17 22:55	2037-26-5	
Dibromofluoromethane (S)	108	%	66-132		5		06/20/17 22:55	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO30-PZM60 **Lab ID: 30221463008** Collected: 06/13/17 15:30 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**8.1J**	ug/L	5.0	2.9	1		06/20/17 20:56	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		06/20/17 20:56	107-13-1	
Benzene	**4.9**	ug/L	1.0	0.18	1		06/20/17 20:56	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		06/20/17 20:56	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 20:56	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 20:56	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		06/20/17 20:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		06/20/17 20:56	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		06/20/17 20:56	75-15-0	L2
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 20:56	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 20:56	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		06/20/17 20:56	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		06/20/17 20:56	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 20:56	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		06/20/17 20:56	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		06/20/17 20:56	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		06/20/17 20:56	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		06/20/17 20:56	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 20:56	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		06/20/17 20:56	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		06/20/17 20:56	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		06/20/17 20:56	75-34-3	L2
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		06/20/17 20:56	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		06/20/17 20:56	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		06/20/17 20:56	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		06/20/17 20:56	156-60-5	L2
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		06/20/17 20:56	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 20:56	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		06/20/17 20:56	10061-02-6	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		06/20/17 20:56	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.26	1		06/20/17 20:56	591-78-6	L2
Iodomethane	ND	ug/L	1.0	4.6	1		06/20/17 20:56	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		06/20/17 20:56	75-09-2	L2
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		06/20/17 20:56	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 20:56	1634-04-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		06/20/17 20:56	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		06/20/17 20:56	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		06/20/17 20:56	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		06/20/17 20:56	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		06/20/17 20:56	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.11	1		06/20/17 20:56	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		06/20/17 20:56	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		06/20/17 20:56	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		06/20/17 20:56	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		06/20/17 20:56	75-69-4	

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ANALYTICAL RESULTS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Sample: CO30-PZM60 **Lab ID: 30221463008** Collected: 06/13/17 15:30 Received: 06/13/17 22:20 Matrix: Water

Comments: • Sample ID, collection date and time not listed on vials, but on baggies they are placed in.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		06/20/17 20:56	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.15	1		06/20/17 20:56	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		06/20/17 20:56	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.77	1		06/20/17 20:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	112	%	78-117		1		06/20/17 20:56	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-128		1		06/20/17 20:56	17060-07-0	
Toluene-d8 (S)	90	%	59-140		1		06/20/17 20:56	2037-26-5	
Dibromofluoromethane (S)	111	%	66-132		1		06/20/17 20:56	1868-53-7	

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QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

QC Batch: 262405 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30221463001, 30221463002, 30221463003, 30221463004, 30221463005, 30221463006, 30221463007, 30221463008

METHOD BLANK: 1292430 | Matrix: Water
Associated Lab Samples: 30221463001, 30221463002, 30221463003, 30221463004, 30221463005, 30221463006, 30221463007, 30221463008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	06/20/17 14:52	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	06/20/17 14:52	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	06/20/17 14:52	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	06/20/17 14:52	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	06/20/17 14:52	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	06/20/17 14:52	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	06/20/17 14:52	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	06/20/17 14:52	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	06/20/17 14:52	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	06/20/17 14:52	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	06/20/17 14:52	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	06/20/17 14:52	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	06/20/17 14:52	
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	06/20/17 14:52	
2-Hexanone	ug/L	10.0 U	10.0	0.26	06/20/17 14:52	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	06/20/17 14:52	
Acetone	ug/L	10.0 U	10.0	2.9	06/20/17 14:52	
Acrylonitrile	ug/L	4.0 U	4.0	0.41	06/20/17 14:52	
Benzene	ug/L	1.0 U	1.0	0.18	06/20/17 14:52	
Bromochloromethane	ug/L	1.0 U	1.0	0.25	06/20/17 14:52	
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	06/20/17 14:52	
Bromoform	ug/L	1.0 U	1.0	0.14	06/20/17 14:52	
Bromomethane	ug/L	1.0 U	1.0	0.64	06/20/17 14:52	
Carbon disulfide	ug/L	1.0 U	1.0	0.22	06/20/17 14:52	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	06/20/17 14:52	
Chlorobenzene	ug/L	1.0 U	1.0	0.17	06/20/17 14:52	
Chloroethane	ug/L	1.0 U	1.0	0.55	06/20/17 14:52	
Chloroform	ug/L	1.0 U	1.0	0.24	06/20/17 14:52	
Chloromethane	ug/L	1.0 U	1.0	0.19	06/20/17 14:52	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	06/20/17 14:52	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	06/20/17 14:52	
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	06/20/17 14:52	
Dibromomethane	ug/L	1.0 U	1.0	0.37	06/20/17 14:52	
Ethylbenzene	ug/L	1.0 U	1.0	0.20	06/20/17 14:52	
Iodomethane	ug/L	50.0 U	50.0	4.6	06/20/17 14:52	
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	06/20/17 14:52	
Methylene Chloride	ug/L	1.0 U	1.0	0.43	06/20/17 14:52	
Naphthalene	ug/L	2.0 U	2.0	0.11	06/20/17 14:52	
Styrene	ug/L	1.0 U	1.0	0.16	06/20/17 14:52	
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	06/20/17 14:52	

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

METHOD BLANK: 1292430 Matrix: Water

Associated Lab Samples: 30221463001, 30221463002, 30221463003, 30221463004, 30221463005, 30221463006, 30221463007, 30221463008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.11	06/20/17 14:52	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	06/20/17 14:52	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	06/20/17 14:52	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	06/20/17 14:52	
Trichloroethene	ug/L	1.0 U	1.0	0.22	06/20/17 14:52	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	06/20/17 14:52	
Vinyl acetate	ug/L	10.0 U	10.0	0.15	06/20/17 14:52	
Vinyl chloride	ug/L	1.0 U	1.0	0.32	06/20/17 14:52	
Xylene (Total)	ug/L	3.0 U	3.0	0.77	06/20/17 14:52	
1,2-Dichloroethane-d4 (S)	%	100	70-128		06/20/17 14:52	
4-Bromofluorobenzene (S)	%	108	78-117		06/20/17 14:52	
Dibromofluoromethane (S)	%	106	66-132		06/20/17 14:52	
Toluene-d8 (S)	%	89	59-140		06/20/17 14:52	

LABORATORY CONTROL SAMPLE: 1292431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.8	94	72-118	
1,1,1-Trichloroethane	ug/L	20	19.7	99	79-125	
1,1,2,2-Tetrachloroethane	ug/L	20	22.0	110	64-130	
1,1,2-Trichloroethane	ug/L	20	20.1	101	78-118	
1,1-Dichloroethane	ug/L	20	14.4	72	77-124	L2
1,1-Dichloroethene	ug/L	20	15.7	78	74-127	
1,2,3-Trichloropropane	ug/L	20	23.7	119	70-123	
1,2-Dibromo-3-chloropropane	ug/L	20	23.6	118	53-133	
1,2-Dibromoethane (EDB)	ug/L	20	18.4	92	69-126	
1,2-Dichlorobenzene	ug/L	20	23.1	115	83-117	
1,2-Dichloroethane	ug/L	20	16.7	83	73-118	
1,2-Dichloropropane	ug/L	20	17.2	86	77-126	
1,4-Dichlorobenzene	ug/L	20	23.8	119	83-119	
2-Butanone (MEK)	ug/L	20	16.4	82	55-134	
2-Hexanone	ug/L	20	14.7	73	78-156	L2
4-Methyl-2-pentanone (MIBK)	ug/L	20	16.1	80	63-121	
Acetone	ug/L	20	14.6	73	51-144	
Acrylonitrile	ug/L	20	13.3	67	39-170	
Benzene	ug/L	20	17.8	89	80-113	
Bromochloromethane	ug/L	20	21.0	105	78-114	
Bromodichloromethane	ug/L	20	20.1	101	78-121	
Bromoform	ug/L	20	23.3	116	71-130	
Bromomethane	ug/L	20	23.8	119	58-154	
Carbon disulfide	ug/L	20	11.5	58	66-152	L2
Carbon tetrachloride	ug/L	20	19.6	98	69-133	
Chlorobenzene	ug/L	20	19.9	100	85-116	

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

LABORATORY CONTROL SAMPLE: 1292431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	18.9	94	76-136	
Chloroform	ug/L	20	19.2	96	76-118	
Chloromethane	ug/L	20	15.6	78	67-148	
cis-1,2-Dichloroethene	ug/L	20	15.6	78	77-126	
cis-1,3-Dichloropropene	ug/L	20	19.0	95	75-119	
Dibromochloromethane	ug/L	20	20.4	102	66-131	
Dibromomethane	ug/L	20	20.9	104	76-121	
Ethylbenzene	ug/L	20	18.0	90	80-115	
Iodomethane	ug/L	20	10.3J	51	10-149	
Methyl-tert-butyl ether	ug/L	20	17.0	85	82-126	
Methylene Chloride	ug/L	20	10.8	54	61-142	L2
Naphthalene	ug/L	20	22.7	114	61-139	
Styrene	ug/L	20	19.8	99	84-120	
Tetrachloroethene	ug/L	20	19.2	96	82-120	
Toluene	ug/L	20	17.9	89	82-116	
trans-1,2-Dichloroethene	ug/L	20	13.8	69	76-125	L2
trans-1,3-Dichloropropene	ug/L	20	18.2	91	73-119	
trans-1,4-Dichloro-2-butene	ug/L	20	11.8	59	27-116	
Trichloroethene	ug/L	20	18.9	94	84-116	
Trichlorofluoromethane	ug/L	20	21.5	108	59-138	
Vinyl acetate	ug/L	20	11.4	57	10-175	
Vinyl chloride	ug/L	20	18.3	91	63-133	
Xylene (Total)	ug/L	60	56.2	94	82-115	
1,2-Dichloroethane-d4 (S)	%			97	70-128	
4-Bromofluorobenzene (S)	%			107	78-117	
Dibromofluoromethane (S)	%			109	66-132	
Toluene-d8 (S)	%			88	59-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1293449 1293450

Parameter	Units	30221524013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	20	20	20.1	19.8	100	99	52-120	2	30	
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	24.2	22.7	121	113	54-140	7	30	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	20.4	20.3	102	102	54-124	1	30	
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	20.9	20.2	104	101	58-120	3	30	
1,1-Dichloroethane	ug/L	1.0 U	20	20	21.5	18.2	107	91	55-133	17	30	
1,1-Dichloroethene	ug/L	1.0 U	20	20	20.1	18.8	101	94	48-141	7	30	
1,2,3-Trichloropropane	ug/L	1.0 U	20	20	24.1	24.6	120	123	51-116	2	30	MH
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	20	20	19.7	19.6	99	98	23-126	1	30	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	20	20	20.6	20.0	103	100	58-115	3	30	
1,2-Dichlorobenzene	ug/L	1.0 U	20	20	16.3	15.9	82	80	57-124	2	30	
1,2-Dichloroethane	ug/L	1.0 U	20	20	21.4	19.7	107	98	58-123	8	30	
1,2-Dichloropropane	ug/L	1.0 U	20	20	19.4	18.2	97	91	55-125	6	30	

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1293449 1293450

Parameter	Units	30221524013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	1.0 U	20	20	15.8	15.6	79	78	61-111	1	30	
2-Butanone (MEK)	ug/L	10.0 U	20	20	18.7	17.0	94	85	43-128	10	30	
2-Hexanone	ug/L	10.0 U	20	20	15.5	15.0	77	75	43-135	3	30	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	20	20	16.2	15.9	81	79	47-123	2	30	
Acetone	ug/L	16.1	20	20	36.1	31.3	100	76	10-150	14	30	
Acrylonitrile	ug/L	4.0 U	20	20	15.4	12.7	77	63	31-182	19	30	
Benzene	ug/L	1.0 U	20	20	23.4	21.2	117	106	63-123	10	30	
Bromochloromethane	ug/L	1.0 U	20	20	24.3	22.6	122	113	42-149	7	30	
Bromodichloromethane	ug/L	1.0 U	20	20	23.2	21.4	116	107	55-127	8	30	
Bromoform	ug/L	1.0 U	20	20	19.1	17.5	95	87	44-131	9	30	
Bromomethane	ug/L	1.0 U	20	20	15.2	13.2	76	66	10-149	14	30	
Carbon disulfide	ug/L	1.0 U	20	20	8.9	9.3	45	47	47-158	4	30	ML
Carbon tetrachloride	ug/L	1.0 U	20	20	22.9	21.8	114	109	44-155	5	30	
Chlorobenzene	ug/L	1.0 U	20	20	19.9	19.4	100	97	57-121	3	30	
Chloroethane	ug/L	1.0 U	20	20	17.4	19.4	87	97	57-156	11	30	
Chloroform	ug/L	1.0 U	20	20	21.5	20.7	107	104	56-132	3	30	
Chloromethane	ug/L	1.0 U	20	20	18.8	13.0	94	65	42-163	37	30	R1
cis-1,2-Dichloroethene	ug/L	1.0 U	20	20	22.3	19.8	112	99	46-139	12	30	
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	18.7	19.2	94	96	55-119	3	30	
Dibromochloromethane	ug/L	1.0 U	20	20	20.0	18.7	100	94	52-129	7	30	
Dibromomethane	ug/L	1.0 U	20	20	24.2	23.5	121	118	52-120	3	30	MH
Ethylbenzene	ug/L	1.0 U	20	20	17.5	18.0	87	90	70-120	3	30	
Iodomethane	ug/L	50.0 U	20	20	7.8J	8.9J	39	44	10-177		30	
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	17.6	17.3	88	87	63-143	1	30	
Methylene Chloride	ug/L	1.0 U	20	20	17.7	13.9	89	70	38-134	24	30	
Naphthalene	ug/L	3.0	20	20	26.0	19.8	115	84	55-122	27	30	
Styrene	ug/L	1.0 U	20	20	18.5	17.9	92	90	49-135	3	30	
Tetrachloroethene	ug/L	1.0 U	20	20	17.7	18.4	88	92	53-125	4	30	
Toluene	ug/L	1.0 U	20	20	21.2	20.7	106	104	66-124	2	30	
trans-1,2-Dichloroethene	ug/L	1.0 U	20	20	20.7	17.6	104	88	52-136	16	30	
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	19.7	18.9	99	94	54-118	4	30	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	20	20	5.5	5.5	28	27	19-116	2	30	
Trichloroethene	ug/L	1.0 U	20	20	22.1	21.4	110	107	50-127	3	30	
Trichlorofluoromethane	ug/L	1.0 U	20	20	24.9	18.2	124	91	63-167	31	30	R1
Vinyl acetate	ug/L	10.0 U	20	20	16.0	12.8	80	64	10-49	22	30	MH
Vinyl chloride	ug/L	1.0 U	20	20	21.3	16.8	107	84	54-149	24	30	
Xylene (Total)	ug/L	3.0 U	60	60	51.0	50.4	85	84	68-123	1	30	
1,2-Dichloroethane-d4 (S)	%						105	103	70-128			
4-Bromofluorobenzene (S)	%						107	106	78-117			
Dibromofluoromethane (S)	%						113	113	66-132			
Toluene-d8 (S)	%						93	93	59-140			

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

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.

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1	RPD value was outside control limits.

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven GW Sampling
Pace Project No.: 30221463

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30221463001	**Trip Blank 1**	EPA 8260B	262405		
30221463002	**CO57-PZP002**	EPA 8260B	262405		
30221463003	**CO02-PZM006**	EPA 8260B	262405		
30221463004	**CO93-PZMXXX**	EPA 8260B	262405		
30221463005	**CO18-PZM006**	EPA 8260B	262405		
30221463006	**CO101-PZMXXX**	EPA 8260B	262405		
30221463007	**CO30-PZM15**	EPA 8260B	262405		
30221463008	**CO30-PZM60**	EPA 8260B	262405		

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CHAIN-OF-CUSTODY

The Chain-of-Custody is a LEGAL DOC

WO#: 30221463

30221463

Section A Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone: 314-620-3056	Fax:
Requested Due Date/TAT:	5 days

Section B Required Project Information:

Report To:	James Calenda
Copy To:	
PO Number:	
Project Name:	Coke Oven Gw Sampling
Project Number:	170384-1-2

Section C Invoice Information:

Attention:	Laura Sargent
Company Name:	EnviroAnalytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MD

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Di Water	Analysis Test (Y/N)	VOC/8260B	SVOC 8270D	DRO/8015B	GRO/8015B	METALS/6010C	Mercury/7471A or 7470A	Hexavalent Chromium/7196A	Total Cyanide/9012A	PCB/8082 (soil)	Oil and Grease/1664A (aq)	Oil and Grease/9071B (soil)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank 1	WT	G					6/13/12			1			X							X												001
2	C057-PZP002	WT	G						0810		3			X							X												002
3	C002-PZM006	WT	G						0924		3			X							X												003
4	C093-PZMXXX	WT	G						1025		3			X							X												004
5	C018-PZM006	WT	G						1155		3			X							X												005
6	C061-PZMXXX	WT	G						1316		3			X							X												006
7	C030-PZM15	WT	G						1428		3			X							X												007
8	C030-PZM60	WT	G						1530		3			X							X												008
9																																	
10																																	
11																																	
12																																	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Data Package Required? (Y/N)	Bob Bentz	6/13/17	1605	David L Hillegass Pace	6/13/17	1610				
Data Validation Required? (Y/N)	David L Hillegass Pace	6/13/17	1820	[illegible] Pace	6/13/17	1845				
If data package is required, attach data package checklist.	[illegible] Pace	6/13/17	2220	Karen Hill	6/13/17	2220	2.8	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Bob Bentz

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 06/13/17

*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.

KEH

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: EnviroAnalytics Project # 30221463 -

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 6 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.8 °C Correction Factor: 0.0 °C Final Temp: 2.8 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KEH 6/14/17

Comments:	Yes	No	N/A		
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:	✓			4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT		✓		5. Sample ID, time and date were on the outside of the ziplocs that the voas came in. Nothing on the actual voas.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:	✓			8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Organic Samples checked for dechlorination:			✓	13.	
Filtered volume received for Dissolved tests			✓	14.	
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.			✓ ✓	15.	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed KEH	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		16.	
Trip Blank Present: Trip Blank Custody Seals Present	✓ ✓			17.	
Rad Aqueous Samples Screened > 0.5 mrem/hr			✓	Initial when completed:	Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

September 19, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
1600 Sparrows Point Blvd
Suite B2
Sparrows Point, MD 21219

RE: Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on September 12, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30229775001	**Trip Blank**	Water	09/12/17 00:01	09/12/17 23:10
30229775002	**C0101-Pzmxxx**	Water	09/12/17 08:30	09/12/17 23:10
30229775003	**C037-PZM038**	Water	09/12/17 09:21	09/12/17 23:10
30229775004	**C039-PZM007**	Water	09/12/17 09:59	09/12/17 23:10
30229775005	**C039-PZM042**	Water	09/12/17 10:43	09/12/17 23:10
30229775006	**C040-PZM008**	Water	09/12/17 11:25	09/12/17 23:10
30229775007	**C038-PZM006**	Water	09/12/17 12:32	09/12/17 23:10
30229775008	**C038-PZM043**	Water	09/12/17 12:59	09/12/17 23:10
30229775009	**C027-PZM012**	Water	09/12/17 14:25	09/12/17 23:10
30229775010	**C027-PZM046**	Water	09/12/17 14:56	09/12/17 23:10

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SAMPLE ANALYTE COUNT

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30229775001	**Trip Blank**	EPA 8260B	MAK	53	PASI-PA
30229775002	**C0101-Pzmxxx**	EPA 8260B	MAK	53	PASI-PA
30229775003	**C037-PZM038**	EPA 8260B	MAK	53	PASI-PA
30229775004	**C039-PZM007**	EPA 8260B	MAK	53	PASI-PA
30229775005	**C039-PZM042**	EPA 8260B	MAK	53	PASI-PA
30229775006	**C040-PZM008**	EPA 8260B	MAK	53	PASI-PA
30229775007	**C038-PZM006**	EPA 8260B	MAK	53	PASI-PA
30229775008	**C038-PZM043**	EPA 8260B	MAK	53	PASI-PA
30229775009	**C027-PZM012**	EPA 8260B	MAK	53	PASI-PA
30229775010	**C027-PZM046**	EPA 8260B	MAK	53	PASI-PA

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: Trip Blank **Lab ID: 30229775001** Collected: 09/12/17 00:01 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	5.0	2.9	1		09/15/17 12:30	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 12:30	107-13-1	M5
Benzene	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 12:30	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 12:30	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:30	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:30	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 12:30	74-83-9	CH,M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 12:30	78-93-3	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 12:30	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:30	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:30	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 12:30	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 12:30	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 12:30	74-87-3	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 12:30	96-12-8	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 12:30	124-48-1	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 12:30	106-93-4	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 12:30	74-95-3	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:30	95-50-1	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 12:30	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 12:30	110-57-6	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 12:30	75-34-3	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 12:30	107-06-2	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 12:30	75-35-4	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 12:30	156-59-2	M5
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:30	156-60-5	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:30	78-87-5	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:30	10061-01-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:30	10061-02-6	M5
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		09/15/17 12:30	100-41-4	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 12:30	591-78-6	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 12:30	74-88-4	L1,M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 12:30	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 12:30	108-10-1	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:30	1634-04-4	M5
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		09/15/17 12:30	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/15/17 12:30	100-42-5	M5
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 12:30	630-20-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:30	79-34-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 12:30	127-18-4	M5
Toluene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:30	108-88-3	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 12:30	71-55-6	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 12:30	79-00-5	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 12:30	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 12:30	75-69-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 12:30	96-18-4	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: Trip Blank **Lab ID: 30229775001** Collected: 09/12/17 00:01 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 12:30	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 12:30	75-01-4	M5
Xylene (Total)	ND	ug/L	1.0	0.77	1		09/15/17 12:30	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	102	%	79-129		1		09/15/17 12:30	460-00-4	M5
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		09/15/17 12:30	17060-07-0	M5
Toluene-d8 (S)	95	%	80-120		1		09/15/17 12:30	2037-26-5	M5
Dibromofluoromethane (S)	100	%	80-120		1		09/15/17 12:30	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C0101-Pzmxxx **Lab ID: 30229775002** Collected: 09/12/17 08:30 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**6200**	ug/L	2500	1460	500		09/15/17 15:27	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 15:02	107-13-1	M5
Benzene	**5690**	ug/L	500	89.0	500		09/15/17 15:27	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 15:02	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 15:02	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 15:02	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 15:02	74-83-9	CH,M5
2-Butanone (MEK)	**994**	ug/L	25.0	1.6	5		09/15/17 15:02	78-93-3	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:02	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 15:02	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/15/17 15:02	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 15:02	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 15:02	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 15:02	74-87-3	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 15:02	96-12-8	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 15:02	124-48-1	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 15:02	106-93-4	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 15:02	74-95-3	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 15:02	95-50-1	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:02	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 15:02	110-57-6	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 15:02	75-34-3	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 15:02	107-06-2	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:02	75-35-4	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 15:02	156-59-2	M5
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 15:02	156-60-5	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 15:02	78-87-5	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 15:02	10061-01-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 15:02	10061-02-6	M5
Ethylbenzene	**5.0**	ug/L	5.0	0.98	5		09/15/17 15:02	100-41-4	M5
2-Hexanone	**109**	ug/L	25.0	1.3	5		09/15/17 15:02	591-78-6	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 15:02	74-88-4	L1,M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 15:02	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 15:02	108-10-1	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 15:02	1634-04-4	M5
Naphthalene	**167**	ug/L	10.0	0.56	5		09/15/17 15:02	91-20-3	M5
Styrene	**5.0 U**	ug/L	5.0	0.81	5		09/15/17 15:02	100-42-5	M5
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 15:02	630-20-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 15:02	79-34-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 15:02	127-18-4	M5
Toluene	**316**	ug/L	5.0	0.55	5		09/15/17 15:02	108-88-3	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 15:02	71-55-6	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 15:02	79-00-5	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:02	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 15:02	75-69-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 15:02	96-18-4	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C0101-Pzmxxx **Lab ID: 30229775002** Collected: 09/12/17 08:30 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 15:02	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 15:02	75-01-4	M5
Xylene (Total)	**63.7**	ug/L	5.0	3.8	5		09/15/17 15:02	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-129		5		09/15/17 15:02	460-00-4	M5
1,2-Dichloroethane-d4 (S)	95	%	80-120		5		09/15/17 15:02	17060-07-0	M5
Toluene-d8 (S)	94	%	80-120		5		09/15/17 15:02	2037-26-5	M5
Dibromofluoromethane (S)	100	%	80-120		5		09/15/17 15:02	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C037-PZM038 **Lab ID: 30229775003** Collected: 09/12/17 09:21 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**28.4**	ug/L	5.0	2.9	1		09/15/17 13:21	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 13:21	107-13-1	M5
Benzene	**7830**	ug/L	50.0	8.9	50		09/15/17 21:33	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 13:21	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:21	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:21	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 13:21	74-83-9	CH,M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 13:21	78-93-3	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 13:21	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:21	56-23-5	M5
Chlorobenzene	**0.44J**	ug/L	1.0	0.17	1		09/15/17 13:21	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 13:21	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 13:21	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 13:21	74-87-3	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 13:21	96-12-8	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 13:21	124-48-1	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 13:21	106-93-4	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 13:21	74-95-3	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:21	95-50-1	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 13:21	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 13:21	110-57-6	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 13:21	75-34-3	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 13:21	107-06-2	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 13:21	75-35-4	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 13:21	156-59-2	M5
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 13:21	156-60-5	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 13:21	78-87-5	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:21	10061-01-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:21	10061-02-6	M5
Ethylbenzene	**238**	ug/L	1.0	0.20	1		09/15/17 13:21	100-41-4	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 13:21	591-78-6	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 13:21	74-88-4	L1,M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 13:21	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 13:21	108-10-1	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:21	1634-04-4	M5
Naphthalene	**1550**	ug/L	40.0	2.2	20		09/15/17 13:46	91-20-3	M5
Styrene	**315**	ug/L	1.0	0.16	1		09/15/17 13:21	100-42-5	M5
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 13:21	630-20-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:21	79-34-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 13:21	127-18-4	M5
Toluene	**5960**	ug/L	20.0	2.2	20		09/15/17 13:46	108-88-3	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 13:21	71-55-6	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 13:21	79-00-5	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 13:21	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 13:21	75-69-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 13:21	96-18-4	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C037-PZM038 **Lab ID: 30229775003** Collected: 09/12/17 09:21 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 13:21	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 13:21	75-01-4	M5
Xylene (Total)	**1720**	ug/L	20.0	15.4	20		09/15/17 13:46	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		1		09/15/17 13:21	460-00-4	M5
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		09/15/17 13:21	17060-07-0	M5
Toluene-d8 (S)	102	%	80-120		1		09/15/17 13:21	2037-26-5	M5
Dibromofluoromethane (S)	100	%	80-120		1		09/15/17 13:21	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C039-PZM007 **Lab ID: 30229775004** Collected: 09/12/17 09:59 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**27.9**	ug/L	5.0	2.9	1		09/15/17 14:11	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 14:11	107-13-1	M5
Benzene	**972**	ug/L	20.0	3.6	20		09/15/17 14:37	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 14:11	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 14:11	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 14:11	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 14:11	74-83-9	CH,M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 14:11	78-93-3	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 14:11	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 14:11	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 14:11	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 14:11	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 14:11	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 14:11	74-87-3	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 14:11	96-12-8	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 14:11	124-48-1	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 14:11	106-93-4	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 14:11	74-95-3	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 14:11	95-50-1	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 14:11	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 14:11	110-57-6	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 14:11	75-34-3	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 14:11	107-06-2	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 14:11	75-35-4	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 14:11	156-59-2	M5
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 14:11	156-60-5	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 14:11	78-87-5	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 14:11	10061-01-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 14:11	10061-02-6	M5
Ethylbenzene	**8.4**	ug/L	1.0	0.20	1		09/15/17 14:11	100-41-4	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 14:11	591-78-6	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 14:11	74-88-4	L1,M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 14:11	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 14:11	108-10-1	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 14:11	1634-04-4	M5
Naphthalene	**918**	ug/L	40.0	2.2	20		09/15/17 14:37	91-20-3	M5
Styrene	**7.7**	ug/L	1.0	0.16	1		09/15/17 14:11	100-42-5	M5
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 14:11	630-20-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 14:11	79-34-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 14:11	127-18-4	M5
Toluene	**213**	ug/L	1.0	0.11	1		09/15/17 14:11	108-88-3	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 14:11	71-55-6	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 14:11	79-00-5	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 14:11	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 14:11	75-69-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 14:11	96-18-4	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C039-PZM007 **Lab ID: 30229775004** Collected: 09/12/17 09:59 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 14:11	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 14:11	75-01-4	M5
Xylene (Total)	**56.1**	ug/L	1.0	0.77	1		09/15/17 14:11	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	103	%	79-129		1		09/15/17 14:11	460-00-4	M5
1,2-Dichloroethane-d4 (S)	94	%	80-120		1		09/15/17 14:11	17060-07-0	M5
Toluene-d8 (S)	97	%	80-120		1		09/15/17 14:11	2037-26-5	M5
Dibromofluoromethane (S)	99	%	80-120		1		09/15/17 14:11	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C039-PZM042 **Lab ID: 30229775005** Collected: 09/12/17 10:43 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**57.9**	ug/L	25.0	14.6	5		09/15/17 15:53	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 15:53	107-13-1	M5
Benzene	**20900**	ug/L	200	35.6	200		09/15/17 16:18	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 15:53	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 15:53	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 15:53	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 15:53	74-83-9	CH,M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 15:53	78-93-3	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:53	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 15:53	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/15/17 15:53	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 15:53	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 15:53	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 15:53	74-87-3	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 15:53	96-12-8	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 15:53	124-48-1	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 15:53	106-93-4	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 15:53	74-95-3	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 15:53	95-50-1	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:53	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 15:53	110-57-6	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 15:53	75-34-3	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 15:53	107-06-2	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:53	75-35-4	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 15:53	156-59-2	M5
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 15:53	156-60-5	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 15:53	78-87-5	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 15:53	10061-01-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 15:53	10061-02-6	M5
Ethylbenzene	**223**	ug/L	5.0	0.98	5		09/15/17 15:53	100-41-4	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 15:53	591-78-6	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 15:53	74-88-4	L1,M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 15:53	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 15:53	108-10-1	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 15:53	1634-04-4	M5
Naphthalene	**1540**	ug/L	10.0	0.56	5		09/15/17 15:53	91-20-3	M5
Styrene	**338**	ug/L	5.0	0.81	5		09/15/17 15:53	100-42-5	M5
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 15:53	630-20-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 15:53	79-34-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 15:53	127-18-4	M5
Toluene	**8150**	ug/L	200	22.0	200		09/15/17 16:18	108-88-3	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 15:53	71-55-6	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 15:53	79-00-5	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:53	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 15:53	75-69-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 15:53	96-18-4	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C039-PZM042 **Lab ID: 30229775005** Collected: 09/12/17 10:43 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 15:53	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 15:53	75-01-4	M5
Xylene (Total)	**1740**	ug/L	5.0	3.8	5		09/15/17 15:53	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	103	%	79-129		5		09/15/17 15:53	460-00-4	M5
1,2-Dichloroethane-d4 (S)	97	%	80-120		5		09/15/17 15:53	17060-07-0	M5
Toluene-d8 (S)	99	%	80-120		5		09/15/17 15:53	2037-26-5	M5
Dibromofluoromethane (S)	99	%	80-120		5		09/15/17 15:53	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C040-PZM008 **Lab ID: 30229775006** Collected: 09/12/17 11:25 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**42.6**	ug/L	5.0	2.9	1		09/15/17 12:55	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 12:55	107-13-1	M5
Benzene	**551**	ug/L	5.0	0.89	5		09/15/17 21:21	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 12:55	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:55	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:55	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 12:55	74-83-9	CH,M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 12:55	78-93-3	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 12:55	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:55	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:55	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 12:55	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 12:55	67-66-3	M5
Chloromethane	**0.96J**	ug/L	1.0	0.19	1		09/15/17 12:55	74-87-3	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 12:55	96-12-8	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 12:55	124-48-1	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 12:55	106-93-4	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 12:55	74-95-3	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:55	95-50-1	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 12:55	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 12:55	110-57-6	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 12:55	75-34-3	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 12:55	107-06-2	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 12:55	75-35-4	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 12:55	156-59-2	M5
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:55	156-60-5	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:55	78-87-5	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:55	10061-01-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:55	10061-02-6	M5
Ethylbenzene	**7.6**	ug/L	1.0	0.20	1		09/15/17 12:55	100-41-4	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 12:55	591-78-6	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 12:55	74-88-4	L1,M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 12:55	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 12:55	108-10-1	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:55	1634-04-4	M5
Naphthalene	**354**	ug/L	2.0	0.11	1		09/15/17 12:55	91-20-3	M5
Styrene	**5.5**	ug/L	1.0	0.16	1		09/15/17 12:55	100-42-5	M5
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 12:55	630-20-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:55	79-34-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 12:55	127-18-4	M5
Toluene	**82.9**	ug/L	1.0	0.11	1		09/15/17 12:55	108-88-3	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 12:55	71-55-6	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 12:55	79-00-5	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 12:55	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 12:55	75-69-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 12:55	96-18-4	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C040-PZM008 **Lab ID: 30229775006** Collected: 09/12/17 11:25 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 12:55	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 12:55	75-01-4	M5
Xylene (Total)	**47.4**	ug/L	1.0	0.77	1		09/15/17 12:55	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		1		09/15/17 12:55	460-00-4	M5
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		09/15/17 12:55	17060-07-0	M5
Toluene-d8 (S)	98	%	80-120		1		09/15/17 12:55	2037-26-5	M5
Dibromofluoromethane (S)	101	%	80-120		1		09/15/17 12:55	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C038-PZM006 **Lab ID: 30229775007** Collected: 09/12/17 12:32 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**35.5**	ug/L	5.0	2.9	1		09/15/17 16:43	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 16:43	107-13-1	M5
Benzene	**6090**	ug/L	50.0	8.9	50		09/15/17 17:08	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 16:43	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 16:43	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 16:43	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 16:43	74-83-9	CH,M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 16:43	78-93-3	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 16:43	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 16:43	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 16:43	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 16:43	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 16:43	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 16:43	74-87-3	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 16:43	96-12-8	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 16:43	124-48-1	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 16:43	106-93-4	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 16:43	74-95-3	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 16:43	95-50-1	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 16:43	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 16:43	110-57-6	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 16:43	75-34-3	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 16:43	107-06-2	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 16:43	75-35-4	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 16:43	156-59-2	M5
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 16:43	156-60-5	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 16:43	78-87-5	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 16:43	10061-01-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 16:43	10061-02-6	M5
Ethylbenzene	**94.9**	ug/L	1.0	0.20	1		09/15/17 16:43	100-41-4	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 16:43	591-78-6	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 16:43	74-88-4	L1,M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 16:43	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 16:43	108-10-1	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 16:43	1634-04-4	M5
Naphthalene	**2070**	ug/L	100	5.6	50		09/15/17 17:08	91-20-3	M5
Styrene	**51.9**	ug/L	1.0	0.16	1		09/15/17 16:43	100-42-5	M5
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 16:43	630-20-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 16:43	79-34-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 16:43	127-18-4	M5
Toluene	**1350**	ug/L	50.0	5.5	50		09/15/17 17:08	108-88-3	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 16:43	71-55-6	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 16:43	79-00-5	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 16:43	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 16:43	75-69-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 16:43	96-18-4	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C038-PZM006 **Lab ID: 30229775007** Collected: 09/12/17 12:32 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 16:43	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 16:43	75-01-4	M5
Xylene (Total)	**698**	ug/L	1.0	0.77	1		09/15/17 16:43	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	106	%	79-129		1		09/15/17 16:43	460-00-4	M5
1,2-Dichloroethane-d4 (S)	95	%	80-120		1		09/15/17 16:43	17060-07-0	M5
Toluene-d8 (S)	100	%	80-120		1		09/15/17 16:43	2037-26-5	M5
Dibromofluoromethane (S)	97	%	80-120		1		09/15/17 16:43	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C038-PZM043 **Lab ID: 30229775008** Collected: 09/12/17 12:59 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**55.4**	ug/L	5.0	2.9	1		09/15/17 17:34	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 17:34	107-13-1	M5
Benzene	**7.2**	ug/L	1.0	0.18	1		09/15/17 17:34	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 17:34	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 17:34	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 17:34	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 17:34	74-83-9	CH,M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 17:34	78-93-3	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 17:34	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 17:34	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 17:34	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 17:34	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 17:34	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 17:34	74-87-3	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 17:34	96-12-8	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 17:34	124-48-1	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 17:34	106-93-4	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 17:34	74-95-3	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 17:34	95-50-1	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 17:34	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 17:34	110-57-6	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 17:34	75-34-3	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 17:34	107-06-2	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 17:34	75-35-4	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 17:34	156-59-2	M5
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 17:34	156-60-5	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 17:34	78-87-5	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 17:34	10061-01-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 17:34	10061-02-6	M5
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		09/15/17 17:34	100-41-4	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 17:34	591-78-6	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 17:34	74-88-4	L1,M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 17:34	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 17:34	108-10-1	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 17:34	1634-04-4	M5
Naphthalene	**3.2**	ug/L	2.0	0.11	1		09/15/17 17:34	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/15/17 17:34	100-42-5	M5
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 17:34	630-20-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 17:34	79-34-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 17:34	127-18-4	M5
Toluene	**0.71J**	ug/L	1.0	0.11	1		09/15/17 17:34	108-88-3	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 17:34	71-55-6	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 17:34	79-00-5	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 17:34	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 17:34	75-69-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 17:34	96-18-4	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C038-PZM043 **Lab ID: 30229775008** Collected: 09/12/17 12:59 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 17:34	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 17:34	75-01-4	M5
Xylene (Total)	ND	ug/L	1.0	0.77	1		09/15/17 17:34	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	102	%	79-129		1		09/15/17 17:34	460-00-4	M5
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		09/15/17 17:34	17060-07-0	M5
Toluene-d8 (S)	92	%	80-120		1		09/15/17 17:34	2037-26-5	M5
Dibromofluoromethane (S)	100	%	80-120		1		09/15/17 17:34	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C027-PZM012 **Lab ID: 30229775009** Collected: 09/12/17 14:25 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**44.3**	ug/L	5.0	2.9	1		09/15/17 18:24	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 18:24	107-13-1	M5
Benzene	**9540**	ug/L	50.0	8.9	50		09/15/17 18:49	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 18:24	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 18:24	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 18:24	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 18:24	74-83-9	CH,M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 18:24	78-93-3	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 18:24	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 18:24	56-23-5	M5
Chlorobenzene	**0.25J**	ug/L	1.0	0.17	1		09/15/17 18:24	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 18:24	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 18:24	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 18:24	74-87-3	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 18:24	96-12-8	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 18:24	124-48-1	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 18:24	106-93-4	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 18:24	74-95-3	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 18:24	95-50-1	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 18:24	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 18:24	110-57-6	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 18:24	75-34-3	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 18:24	107-06-2	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 18:24	75-35-4	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 18:24	156-59-2	M5
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 18:24	156-60-5	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 18:24	78-87-5	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 18:24	10061-01-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 18:24	10061-02-6	M5
Ethylbenzene	**130**	ug/L	1.0	0.20	1		09/15/17 18:24	100-41-4	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 18:24	591-78-6	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 18:24	74-88-4	L1,M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 18:24	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 18:24	108-10-1	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 18:24	1634-04-4	M5
Naphthalene	**1280**	ug/L	100	5.6	50		09/15/17 18:49	91-20-3	M5
Styrene	**134**	ug/L	1.0	0.16	1		09/15/17 18:24	100-42-5	M5
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 18:24	630-20-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 18:24	79-34-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 18:24	127-18-4	M5
Toluene	**3040**	ug/L	50.0	5.5	50		09/15/17 18:49	108-88-3	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 18:24	71-55-6	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 18:24	79-00-5	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 18:24	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 18:24	75-69-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 18:24	96-18-4	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C027-PZM012 **Lab ID: 30229775009** Collected: 09/12/17 14:25 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 18:24	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 18:24	75-01-4	M5
Xylene (Total)	**1060**	ug/L	1.0	0.77	1		09/15/17 18:24	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-129		1		09/15/17 18:24	460-00-4	M5
1,2-Dichloroethane-d4 (S)	95	%	80-120		1		09/15/17 18:24	17060-07-0	M5
Toluene-d8 (S)	103	%	80-120		1		09/15/17 18:24	2037-26-5	M5
Dibromofluoromethane (S)	99	%	80-120		1		09/15/17 18:24	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C027-PZM046 **Lab ID: 30229775010** Collected: 09/12/17 14:56 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**60.0**	ug/L	25.0	14.6	5		09/15/17 19:15	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 19:15	107-13-1	M5
Benzene	**212000**	ug/L	2000	356	2000		09/15/17 19:40	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 19:15	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 19:15	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 19:15	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 19:15	74-83-9	CH,M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 19:15	78-93-3	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:15	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 19:15	56-23-5	M5
Chlorobenzene	**1.9J**	ug/L	5.0	0.85	5		09/15/17 19:15	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 19:15	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 19:15	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 19:15	74-87-3	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 19:15	96-12-8	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 19:15	124-48-1	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 19:15	106-93-4	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 19:15	74-95-3	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 19:15	95-50-1	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:15	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 19:15	110-57-6	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 19:15	75-34-3	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 19:15	107-06-2	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:15	75-35-4	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 19:15	156-59-2	M5
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 19:15	156-60-5	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 19:15	78-87-5	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 19:15	10061-01-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 19:15	10061-02-6	M5
Ethylbenzene	**505**	ug/L	5.0	0.98	5		09/15/17 19:15	100-41-4	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 19:15	591-78-6	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 19:15	74-88-4	L1,M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 19:15	75-09-2	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 19:15	108-10-1	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 19:15	1634-04-4	M5
Naphthalene	**19700**	ug/L	4000	222	2000		09/15/17 19:40	91-20-3	M5
Styrene	**88.4**	ug/L	5.0	0.81	5		09/15/17 19:15	100-42-5	M5
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 19:15	630-20-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 19:15	79-34-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 19:15	127-18-4	M5
Toluene	**30300**	ug/L	2000	220	2000		09/15/17 19:40	108-88-3	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 19:15	71-55-6	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 19:15	79-00-5	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:15	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 19:15	75-69-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 19:15	96-18-4	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Sample: C027-PZM046 **Lab ID: 30229775010** Collected: 09/12/17 14:56 Received: 09/12/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 19:15	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 19:15	75-01-4	M5
Xylene (Total)	**7850**	ug/L	2000	1540	2000		09/15/17 19:40	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	99	%	79-129		5		09/15/17 19:15	460-00-4	M5
1,2-Dichloroethane-d4 (S)	97	%	80-120		5		09/15/17 19:15	17060-07-0	M5
Toluene-d8 (S)	101	%	80-120		5		09/15/17 19:15	2037-26-5	M5
Dibromofluoromethane (S)	100	%	80-120		5		09/15/17 19:15	1868-53-7	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

QC Batch: 271824 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30229775001, 30229775002, 30229775003, 30229775004, 30229775005, 30229775006, 30229775007, 30229775008, 30229775009, 30229775010

METHOD BLANK: 1337451 | Matrix: Water
Associated Lab Samples: 30229775001, 30229775002, 30229775003, 30229775004, 30229775005, 30229775006, 30229775007, 30229775008, 30229775009, 30229775010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	09/15/17 11:39	M5
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:39	M5
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	09/15/17 11:39	M5
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	09/15/17 11:39	M5
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	09/15/17 11:39	M5
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	09/15/17 11:39	M5
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	09/15/17 11:39	M5
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	09/15/17 11:39	M5
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	09/15/17 11:39	M5
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	09/15/17 11:39	M5
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	09/15/17 11:39	M5
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	09/15/17 11:39	M5
2-Hexanone	ug/L	10.0 U	10.0	0.26	09/15/17 11:39	M5
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	09/15/17 11:39	M5
Acetone	ug/L	10.0 U	10.0	2.9	09/15/17 11:39	M5
Acrylonitrile	ug/L	4.0 U	4.0	0.41	09/15/17 11:39	M5
Benzene	ug/L	1.0 U	1.0	0.18	09/15/17 11:39	M5
Bromochloromethane	ug/L	1.0 U	1.0	0.25	09/15/17 11:39	M5
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
Bromoform	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
Bromomethane	ug/L	1.0 U	1.0	0.64	09/15/17 11:39	CH,M5
Carbon disulfide	ug/L	1.0 U	1.0	0.22	09/15/17 11:39	M5
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
Chlorobenzene	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
Chloroethane	ug/L	1.0 U	1.0	0.55	09/15/17 11:39	M5
Chloroform	ug/L	1.0 U	1.0	0.24	09/15/17 11:39	M5
Chloromethane	ug/L	1.0 U	1.0	0.19	09/15/17 11:39	M5
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	09/15/17 11:39	M5
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:39	M5
Dibromomethane	ug/L	1.0 U	1.0	0.37	09/15/17 11:39	M5
Ethylbenzene	ug/L	1.0 U	1.0	0.20	09/15/17 11:39	M5
Iodomethane	ug/L	50.0 U	50.0	4.6	09/15/17 11:39	M5
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
Methylene Chloride	ug/L	1.0 U	1.0	0.43	09/15/17 11:39	M5
Naphthalene	ug/L	2.0 U	2.0	0.11	09/15/17 11:39	M5
Styrene	ug/L	1.0 U	1.0	0.16	09/15/17 11:39	M5
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	09/15/17 11:39	M5

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

METHOD BLANK: 1337451 Matrix: Water

Associated Lab Samples: 30229775001, 30229775002, 30229775003, 30229775004, 30229775005, 30229775006, 30229775007, 30229775008, 30229775009, 30229775010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.11	09/15/17 11:39	M5
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	09/15/17 11:39	M5
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	09/15/17 11:39	M5
Trichloroethene	ug/L	1.0 U	1.0	0.22	09/15/17 11:39	M5
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	09/15/17 11:39	M5
Vinyl acetate	ug/L	10.0 U	10.0	0.15	09/15/17 11:39	M5
Vinyl chloride	ug/L	1.0 U	1.0	0.32	09/15/17 11:39	M5
Xylene (Total)	ug/L	3.0 U	3.0	0.77	09/15/17 11:39	M5
1,2-Dichloroethane-d4 (S)	%	98	80-120		09/15/17 11:39	M5
4-Bromofluorobenzene (S)	%	103	79-129		09/15/17 11:39	M5
Dibromofluoromethane (S)	%	98	80-120		09/15/17 11:39	M5
Toluene-d8 (S)	%	95	80-120		09/15/17 11:39	M5

LABORATORY CONTROL SAMPLE: 1337452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.8	99	70-130	M5
1,1,1-Trichloroethane	ug/L	20	19.3	96	70-130	M5
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	92	65-127	M5
1,1,2-Trichloroethane	ug/L	20	19.6	98	70-130	M5
1,1-Dichloroethane	ug/L	20	19.2	96	70-130	M5
1,1-Dichloroethene	ug/L	20	19.5	98	70-130	M5
1,2,3-Trichloropropane	ug/L	20	19.7	98	70-130	M5
1,2-Dibromo-3-chloropropane	ug/L	20	18.7	93	58-128	M5
1,2-Dibromoethane (EDB)	ug/L	20	19.7	98	70-130	M5
1,2-Dichlorobenzene	ug/L	20	19.6	98	70-130	M5
1,2-Dichloroethane	ug/L	20	19.8	99	70-130	M5
1,2-Dichloropropane	ug/L	20	19.5	98	70-130	M5
1,4-Dichlorobenzene	ug/L	20	19.6	98	70-130	M5
2-Butanone (MEK)	ug/L	20	17.5	87	72-170	M5
2-Hexanone	ug/L	20	17.0	85	65-151	M5
4-Methyl-2-pentanone (MIBK)	ug/L	20	18.6	93	66-150	M5
Acetone	ug/L	20	19.5	97	30-179	M5
Acrylonitrile	ug/L	20	18.3	91	48-172	M5
Benzene	ug/L	20	19.4	97	70-130	M5
Bromochloromethane	ug/L	20	22.8	114	70-130	M5
Bromodichloromethane	ug/L	20	17.9	89	70-130	M5
Bromoform	ug/L	20	18.5	92	70-130	M5
Bromomethane	ug/L	20	30.4	152	47-174	CH,M5
Carbon disulfide	ug/L	20	18.5	92	43-133	M5
Carbon tetrachloride	ug/L	20	18.7	94	56-143	M5
Chlorobenzene	ug/L	20	20.0	100	70-130	M5

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REPORT OF LABORATORY ANALYSIS

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(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

LABORATORY CONTROL SAMPLE: 1337452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	18.1	91	67-139	M5
Chloroform	ug/L	20	19.0	95	70-130	M5
Chloromethane	ug/L	20	18.5	92	57-138	M5
cis-1,2-Dichloroethene	ug/L	20	19.8	99	70-130	M5
cis-1,3-Dichloropropene	ug/L	20	18.4	92	70-130	M5
Dibromochloromethane	ug/L	20	19.3	96	70-130	M5
Dibromomethane	ug/L	20	22.1	111	70-130	M5
Ethylbenzene	ug/L	20	20.2	101	70-130	M5
Iodomethane	ug/L	20	35.5J	177	10-175	L1,M5
Methyl-tert-butyl ether	ug/L	20	19.1	95	70-130	M5
Methylene Chloride	ug/L	20	21.4	107	55-144	M5
Naphthalene	ug/L	20	20.2	101	70-130	M5
Styrene	ug/L	20	19.4	97	70-130	M5
Tetrachloroethene	ug/L	20	21.0	105	70-130	M5
Toluene	ug/L	20	18.8	94	70-130	M5
trans-1,2-Dichloroethene	ug/L	20	19.8	99	70-130	M5
trans-1,3-Dichloropropene	ug/L	20	18.2	91	70-130	M5
trans-1,4-Dichloro-2-butene	ug/L	20	16.7	84	27-116	M5
Trichloroethene	ug/L	20	20.9	104	70-130	M5
Trichlorofluoromethane	ug/L	20	23.5	118	60-148	M5
Vinyl acetate	ug/L	20	15.2	76	30-181	M5
Vinyl chloride	ug/L	20	19.4	97	70-130	M5
Xylene (Total)	ug/L	60	58.5	98	70-130	M5
1,2-Dichloroethane-d4 (S)	%			96	80-120	M5
4-Bromofluorobenzene (S)	%			99	79-129	M5
Dibromofluoromethane (S)	%			104	80-120	M5
Toluene-d8 (S)	%			96	80-120	M5

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: 271824

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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Greensburg, PA 15601
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229775

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30229775001	**Trip Blank**	EPA 8260B	271824		
30229775002	**C0101-Pzmxxx**	EPA 8260B	271824		
30229775003	**C037-PZM038**	EPA 8260B	271824		
30229775004	**C039-PZM007**	EPA 8260B	271824		
30229775005	**C039-PZM042**	EPA 8260B	271824		
30229775006	**C040-PZM008**	EPA 8260B	271824		
30229775007	**C038-PZM006**	EPA 8260B	271824		
30229775008	**C038-PZM043**	EPA 8260B	271824		
30229775009	**C027-PZM012**	EPA 8260B	271824		
30229775010	**C027-PZM046**	EPA 8260B	271824		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

10 29

Page: 1 of 1

Section A Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone:	314-620-3056
Fax:	
Requested Due Date/TAT:	5 day

Section B Required Project Information:

Report To:	James Calenda
Copy To:	
PO Number:	
Project Name:	Coke Oven 3rd Quarter
Project Number:	170387M42

Section C Invoice Information:

Attention:	Laura Sargent
Company Name:	EnviroAnalytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MD

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	DI Water	Analysis Test (Y/N)	VOC/8260B	SVOC 8270D	DRO/8015B	GRO/8015B	METALS/6010C	Mercury/7471A or 7470A	Hexavalent Chromium/7196A	Total Cyanide/9012A	PCB/8082 (soil)		Oil and Grease/1664A (ac	Oil and Grease/9071B (soil)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank	WT	G			9/12	17		2				X						X													001
2	C0101-PZMxxx						0830		3				X						X													002
3	C037-PZM038						0921		3				X						X													003
4	C039-PZM007						0959		3				X						X													004
5	C039-PZM042						1043		3				X						X													005
6	C040-PZM008						1125		3				X						X													006
7	C038-PZM006						1232		3				X						X													007
8	C038-PZM043						1259		3				X						X													008
9	C027-PZM012						1425		3				X						X													009
10	C027-PZM046						1456		3				X						X													010
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Data Package Required? (Y/N):	[signature]	9/12/17	1540	David L Hillegan/Pace	9/12/17	1630				
Data Validation Required? (Y/N):	David L Hillegan Pace	9/12/17	1935	[signature]	9/12/17	1935				
If data package is required, attach data package checklist.	[signature]	9/12/17	2310	Ashley Ryan/Pace	9-12-17	2310	3.4	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 30229775

30229775

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Leandra M. Glumas

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 09/12/17

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.

F-ALL-Q-020rev.06, 2-Feb-2007

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EnviroAna Project # 30229775

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label AM
LIMS Login AM

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 6 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.4 °C Correction Factor: +0.0 °C Final Temp: 3.4 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AML 9-13-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -includes date/time/ID Matrix: WT	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:	X			8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.
Organic Samples checked for dechlorination:			X	14.
Filtered volume received for Dissolved tests			X	15.
All containers have been checked for preservation.			X	16.
All containers needing preservation are found to be in compliance with EPA recommendation.			X	
exceptions: (VOA) coliform, TOC, O&G, Phenolics				Initial when completed AM / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		X		17.
Trip Blank Present:	X			18.
Trip Blank Custody Seals Present	X			
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed: / Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

September 19, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
1600 Sparrows Point Blvd
Suite B2
Sparrows Point, MD 21219

RE: Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Dear Mr. Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on September 11, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project:	Coke Oven 3rd Quarter
Pace Project No.:	30229665

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30229665001	**Trip Blank**	Water	09/11/17 00:01	09/11/17 23:10
30229665002	**CO104-PZMXXX**	Water	09/11/17 09:26	09/11/17 23:10
30229665003	**CO103-PZMXXX**	Water	09/11/17 10:21	09/11/17 23:10
30229665004	**CO30-PZM015**	Water	09/11/17 11:10	09/11/17 23:10
30229665005	**CO30-PZM060**	Water	09/11/17 11:48	09/11/17 23:10
30229665006	**CO102-PZMXXX**	Water	09/11/17 13:29	09/11/17 23:10
30229665007	**CO02-PZM006**	Water	09/11/17 14:32	09/11/17 23:10
30229665008	**CO18-PZM006**	Water	09/11/17 15:16	09/11/17 23:10

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SAMPLE ANALYTE COUNT

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30229665001	**Trip Blank**	EPA 8260B	MAK	53	PASI-PA
30229665002	**CO104-PZMXXX**	EPA 8260B	MAK	53	PASI-PA
30229665003	**CO103-PZMXXX**	EPA 8260B	MAK	53	PASI-PA
30229665004	**CO30-PZM015**	EPA 8260B	MAK	53	PASI-PA
30229665005	**CO30-PZM060**	EPA 8260B	MAK	53	PASI-PA
30229665006	**CO102-PZMXXX**	EPA 8260B	MAK	53	PASI-PA
30229665007	**CO02-PZM006**	EPA 8260B	MAK	53	PASI-PA
30229665008	**CO18-PZM006**	EPA 8260B	MAK	53	PASI-PA

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: Trip Blank **Lab ID: 30229665001** Collected: 09/11/17 00:01 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 12:04	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 12:04	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:04	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 12:04	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 12:04	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 12:04	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 12:04	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 12:04	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 12:04	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:04	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 12:04	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:04	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 12:04	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 12:04	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 12:04	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 12:04	108-10-1	M5
Acetone	**13.1**	ug/L	5.0	2.9	1		09/15/17 12:04	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 12:04	107-13-1	M5
Benzene	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 12:04	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 12:04	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:04	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:04	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 12:04	74-83-9	CH,M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 12:04	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:04	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:04	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 12:04	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 12:04	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 12:04	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 12:04	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 12:04	74-95-3	M5
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		09/15/17 12:04	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 12:04	74-88-4	L1,M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:04	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 12:04	75-09-2	M5
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		09/15/17 12:04	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/15/17 12:04	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 12:04	127-18-4	M5
Toluene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:04	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 12:04	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 12:04	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 12:04	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 12:04	75-01-4	M5
Xylene (Total)	ND	ug/L	1.0	0.77	1		09/15/17 12:04	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 12:04	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:04	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: Trip Blank **Lab ID: 30229665001** Collected: 09/11/17 00:01 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:04	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:04	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 12:04	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	105	%	79-129		1		09/15/17 12:04	460-00-4	M5
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		09/15/17 12:04	17060-07-0	M5
Toluene-d8 (S)	96	%	80-120		1		09/15/17 12:04	2037-26-5	M5
Dibromofluoromethane (S)	101	%	80-120		1		09/15/17 12:04	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO104-PZMXXX **Lab ID: 30229665002** Collected: 09/11/17 09:26 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 13:08	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 13:08	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:08	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 13:08	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 13:08	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 13:08	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 13:08	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 13:08	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 13:08	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:08	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 13:08	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 13:08	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 13:08	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 13:08	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 13:08	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 13:08	108-10-1	M5
Acetone	**114**	ug/L	5.0	2.9	1		09/15/17 13:08	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 13:08	107-13-1	M5
Benzene	**5.5**	ug/L	1.0	0.18	1		09/15/17 13:08	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 13:08	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:08	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:08	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 13:08	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 13:08	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:08	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:08	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 13:08	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 13:08	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 13:08	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 13:08	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 13:08	74-95-3	M5
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		09/15/17 13:08	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 13:08	74-88-4	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:08	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 13:08	75-09-2	M5
Naphthalene	**2.2**	ug/L	2.0	0.11	1		09/15/17 13:08	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/15/17 13:08	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 13:08	127-18-4	M5
Toluene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 13:08	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 13:08	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 13:08	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 13:08	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 13:08	75-01-4	M5
Xylene (Total)	ND	ug/L	1.0	0.77	1		09/15/17 13:08	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 13:08	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:08	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO104-PZMXXX **Lab ID: 30229665002** Collected: 09/11/17 09:26 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 13:08	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:08	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 13:08	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		1		09/15/17 13:08	460-00-4	M5
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		09/15/17 13:08	17060-07-0	M5
Toluene-d8 (S)	96	%	80-120		1		09/15/17 13:08	2037-26-5	M5
Dibromofluoromethane (S)	101	%	80-120		1		09/15/17 13:08	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO103-PZMXXX **Lab ID: 30229665003** Collected: 09/11/17 10:21 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 20:05	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 20:05	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 20:05	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 20:05	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 20:05	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:05	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 20:05	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 20:05	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 20:05	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 20:05	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 20:05	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 20:05	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:05	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 20:05	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 20:05	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 20:05	108-10-1	M5
Acetone	**97.4**	ug/L	25.0	14.6	5		09/15/17 20:05	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 20:05	107-13-1	M5
Benzene	**15800**	ug/L	200	35.6	200		09/15/17 20:31	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 20:05	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 20:05	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 20:05	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 20:05	74-83-9	CH,M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:05	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 20:05	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/15/17 20:05	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 20:05	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 20:05	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 20:05	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 20:05	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 20:05	74-95-3	M5
Ethylbenzene	**31.3**	ug/L	5.0	0.98	5		09/15/17 20:05	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 20:05	74-88-4	L1,M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 20:05	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 20:05	75-09-2	M5
Naphthalene	**1970**	ug/L	10.0	0.56	5		09/15/17 20:05	91-20-3	M5
Styrene	**3.1J**	ug/L	5.0	0.81	5		09/15/17 20:05	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 20:05	127-18-4	M5
Toluene	**1110**	ug/L	5.0	0.55	5		09/15/17 20:05	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:05	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 20:05	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 20:05	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 20:05	75-01-4	M5
Xylene (Total)	**520**	ug/L	5.0	3.8	5		09/15/17 20:05	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 20:05	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 20:05	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO103-PZMXXX **Lab ID: 30229665003** Collected: 09/11/17 10:21 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 20:05	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 20:05	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 20:05	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		5		09/15/17 20:05	460-00-4	M5
1,2-Dichloroethane-d4 (S)	93	%	80-120		5		09/15/17 20:05	17060-07-0	M5
Toluene-d8 (S)	95	%	80-120		5		09/15/17 20:05	2037-26-5	M5
Dibromofluoromethane (S)	96	%	80-120		5		09/15/17 20:05	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO30-PZM015 **Lab ID: 30229665004** Collected: 09/11/17 11:10 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 19:53	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 19:53	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 19:53	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 19:53	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 19:53	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:53	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 19:53	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 19:53	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 19:53	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 19:53	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 19:53	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 19:53	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:53	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 19:53	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 19:53	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 19:53	108-10-1	M5
Acetone	**159**	ug/L	25.0	14.6	5		09/15/17 19:53	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 19:53	107-13-1	M5
Benzene	**88400**	ug/L	500	89.0	500		09/15/17 20:18	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 19:53	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 19:53	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 19:53	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 19:53	74-83-9	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:53	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 19:53	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/15/17 19:53	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 19:53	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 19:53	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 19:53	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 19:53	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 19:53	74-95-3	M5
Ethylbenzene	**118**	ug/L	5.0	0.98	5		09/15/17 19:53	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 19:53	74-88-4	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 19:53	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 19:53	75-09-2	M5
Naphthalene	**3560**	ug/L	1000	55.5	500		09/15/17 20:18	91-20-3	M5
Styrene	**18.3**	ug/L	5.0	0.81	5		09/15/17 19:53	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 19:53	127-18-4	M5
Toluene	**5860**	ug/L	500	55.0	500		09/15/17 20:18	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:53	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 19:53	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 19:53	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 19:53	75-01-4	M5
Xylene (Total)	**1620**	ug/L	5.0	3.8	5		09/15/17 19:53	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 19:53	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 19:53	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO30-PZM015 **Lab ID: 30229665004** Collected: 09/11/17 11:10 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 19:53	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 19:53	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 19:53	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		5		09/15/17 19:53	460-00-4	M5
1,2-Dichloroethane-d4 (S)	97	%	80-120		5		09/15/17 19:53	17060-07-0	M5
Toluene-d8 (S)	100	%	80-120		5		09/15/17 19:53	2037-26-5	M5
Dibromofluoromethane (S)	97	%	80-120		5		09/15/17 19:53	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO30-PZM060 **Lab ID: 30229665005** Collected: 09/11/17 11:48 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 13:33	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 13:33	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:33	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 13:33	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 13:33	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 13:33	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 13:33	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 13:33	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 13:33	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:33	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 13:33	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 13:33	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 13:33	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 13:33	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 13:33	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 13:33	108-10-1	M5
Acetone	**58.8**	ug/L	5.0	2.9	1		09/15/17 13:33	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 13:33	107-13-1	M5
Benzene	**5.2**	ug/L	1.0	0.18	1		09/15/17 13:33	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 13:33	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:33	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:33	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 13:33	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 13:33	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:33	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:33	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 13:33	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 13:33	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 13:33	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 13:33	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 13:33	74-95-3	M5
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		09/15/17 13:33	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 13:33	74-88-4	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:33	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 13:33	75-09-2	M5
Naphthalene	**2.0J**	ug/L	2.0	0.11	1		09/15/17 13:33	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/15/17 13:33	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 13:33	127-18-4	M5
Toluene	**1.2**	ug/L	1.0	0.11	1		09/15/17 13:33	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 13:33	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 13:33	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 13:33	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 13:33	75-01-4	M5
Xylene (Total)	ND	ug/L	1.0	0.77	1		09/15/17 13:33	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 13:33	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 13:33	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO30-PZM060 **Lab ID: 30229665005** Collected: 09/11/17 11:48 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 13:33	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 13:33	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 13:33	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		1		09/15/17 13:33	460-00-4	M5
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		09/15/17 13:33	17060-07-0	M5
Toluene-d8 (S)	97	%	80-120		1		09/15/17 13:33	2037-26-5	M5
Dibromofluoromethane (S)	99	%	80-120		1		09/15/17 13:33	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO102-PZMXXX **Lab ID: 30229665006** Collected: 09/11/17 13:29 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 13:58	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 13:58	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 13:58	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 13:58	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 13:58	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 13:58	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 13:58	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 13:58	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 13:58	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 13:58	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 13:58	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 13:58	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 13:58	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 13:58	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 13:58	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 13:58	108-10-1	M5
Acetone	**89.4**	ug/L	25.0	14.6	5		09/15/17 13:58	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 13:58	107-13-1	M5
Benzene	**25200**	ug/L	100	17.8	100		09/15/17 14:24	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 13:58	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 13:58	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 13:58	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 13:58	74-83-9	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 13:58	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 13:58	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/15/17 13:58	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 13:58	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 13:58	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 13:58	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 13:58	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 13:58	74-95-3	M5
Ethylbenzene	**25.8**	ug/L	5.0	0.98	5		09/15/17 13:58	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 13:58	74-88-4	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 13:58	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 13:58	75-09-2	M5
Naphthalene	**1070**	ug/L	10.0	0.56	5		09/15/17 13:58	91-20-3	M5
Styrene	**8.1**	ug/L	5.0	0.81	5		09/15/17 13:58	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 13:58	127-18-4	M5
Toluene	**1400**	ug/L	5.0	0.55	5		09/15/17 13:58	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 13:58	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 13:58	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 13:58	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 13:58	75-01-4	M5
Xylene (Total)	**287**	ug/L	5.0	3.8	5		09/15/17 13:58	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 13:58	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 13:58	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO102-PZMXXX **Lab ID: 30229665006** Collected: 09/11/17 13:29 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 13:58	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 13:58	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 13:58	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	98	%	79-129		5		09/15/17 13:58	460-00-4	M5
1,2-Dichloroethane-d4 (S)	101	%	80-120		5		09/15/17 13:58	17060-07-0	M5
Toluene-d8 (S)	98	%	80-120		5		09/15/17 13:58	2037-26-5	M5
Dibromofluoromethane (S)	99	%	80-120		5		09/15/17 13:58	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO02-PZM006 **Lab ID: 30229665007** Collected: 09/11/17 14:32 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 14:49	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 14:49	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 14:49	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 14:49	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 14:49	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 14:49	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 14:49	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 14:49	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 14:49	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 14:49	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 14:49	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 14:49	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 14:49	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 14:49	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 14:49	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 14:49	108-10-1	M5
Acetone	**49.3J**	ug/L	25.0	14.6	5		09/15/17 14:49	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 14:49	107-13-1	M5
Benzene	**15700**	ug/L	100	17.8	100		09/15/17 15:15	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 14:49	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 14:49	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 14:49	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 14:49	74-83-9	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 14:49	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 14:49	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/15/17 14:49	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 14:49	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 14:49	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 14:49	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 14:49	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 14:49	74-95-3	M5
Ethylbenzene	**271**	ug/L	5.0	0.98	5		09/15/17 14:49	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 14:49	74-88-4	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 14:49	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 14:49	75-09-2	M5
Naphthalene	**276**	ug/L	10.0	0.56	5		09/15/17 14:49	91-20-3	M5
Styrene	**5.8**	ug/L	5.0	0.81	5		09/15/17 14:49	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 14:49	127-18-4	M5
Toluene	**43.5**	ug/L	5.0	0.55	5		09/15/17 14:49	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 14:49	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 14:49	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 14:49	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 14:49	75-01-4	M5
Xylene (Total)	**403**	ug/L	5.0	3.8	5		09/15/17 14:49	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 14:49	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 14:49	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO02-PZM006 **Lab ID: 30229665007** Collected: 09/11/17 14:32 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 14:49	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 14:49	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 14:49	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	96	%	79-129		5		09/15/17 14:49	460-00-4	M5
1,2-Dichloroethane-d4 (S)	94	%	80-120		5		09/15/17 14:49	17060-07-0	M5
Toluene-d8 (S)	99	%	80-120		5		09/15/17 14:49	2037-26-5	M5
Dibromofluoromethane (S)	104	%	80-120		5		09/15/17 14:49	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO18-PZM006 **Lab ID: 30229665008** Collected: 09/11/17 15:16 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 15:40	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 15:40	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 15:40	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 15:40	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 15:40	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:40	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 15:40	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 15:40	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 15:40	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 15:40	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 15:40	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 15:40	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:40	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 15:40	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 15:40	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 15:40	108-10-1	M5
Acetone	**136**	ug/L	25.0	14.6	5		09/15/17 15:40	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 15:40	107-13-1	M5
Benzene	**454000**	ug/L	2000	356	2000		09/15/17 16:05	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 15:40	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 15:40	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 15:40	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 15:40	74-83-9	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:40	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 15:40	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/15/17 15:40	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 15:40	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 15:40	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 15:40	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 15:40	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 15:40	74-95-3	M5
Ethylbenzene	**86.8**	ug/L	5.0	0.98	5		09/15/17 15:40	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 15:40	74-88-4	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 15:40	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 15:40	75-09-2	M5
Naphthalene	**211**	ug/L	10.0	0.56	5		09/15/17 15:40	91-20-3	M5
Styrene	**3.1J**	ug/L	5.0	0.81	5		09/15/17 15:40	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 15:40	127-18-4	M5
Toluene	**28500**	ug/L	2000	220	2000		09/15/17 16:05	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 15:40	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 15:40	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 15:40	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 15:40	75-01-4	M5
Xylene (Total)	**2260**	ug/L	5.0	3.8	5		09/15/17 15:40	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 15:40	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 15:40	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Sample: CO18-PZM006 **Lab ID: 30229665008** Collected: 09/11/17 15:16 Received: 09/11/17 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 15:40	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 15:40	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 15:40	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	98	%	79-129		5		09/15/17 15:40	460-00-4	M5
1,2-Dichloroethane-d4 (S)	96	%	80-120		5		09/15/17 15:40	17060-07-0	M5
Toluene-d8 (S)	98	%	80-120		5		09/15/17 15:40	2037-26-5	M5
Dibromofluoromethane (S)	100	%	80-120		5		09/15/17 15:40	1868-53-7	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

QC Batch: 271824 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30229665001, 30229665003

METHOD BLANK: 1337451 | Matrix: Water
Associated Lab Samples: 30229665001, 30229665003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	09/15/17 11:39	M5
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:39	M5
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	09/15/17 11:39	M5
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	09/15/17 11:39	M5
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	09/15/17 11:39	M5
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	09/15/17 11:39	M5
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	09/15/17 11:39	M5
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	09/15/17 11:39	M5
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	09/15/17 11:39	M5
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	09/15/17 11:39	M5
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	09/15/17 11:39	M5
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	09/15/17 11:39	M5
2-Hexanone	ug/L	10.0 U	10.0	0.26	09/15/17 11:39	M5
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	09/15/17 11:39	M5
Acetone	ug/L	10.0 U	10.0	2.9	09/15/17 11:39	M5
Acrylonitrile	ug/L	4.0 U	4.0	0.41	09/15/17 11:39	M5
Benzene	ug/L	1.0 U	1.0	0.18	09/15/17 11:39	M5
Bromochloromethane	ug/L	1.0 U	1.0	0.25	09/15/17 11:39	M5
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
Bromoform	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
Bromomethane	ug/L	1.0 U	1.0	0.64	09/15/17 11:39	CH,M5
Carbon disulfide	ug/L	1.0 U	1.0	0.22	09/15/17 11:39	M5
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
Chlorobenzene	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
Chloroethane	ug/L	1.0 U	1.0	0.55	09/15/17 11:39	M5
Chloroform	ug/L	1.0 U	1.0	0.24	09/15/17 11:39	M5
Chloromethane	ug/L	1.0 U	1.0	0.19	09/15/17 11:39	M5
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	09/15/17 11:39	M5
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:39	M5
Dibromomethane	ug/L	1.0 U	1.0	0.37	09/15/17 11:39	M5
Ethylbenzene	ug/L	1.0 U	1.0	0.20	09/15/17 11:39	M5
Iodomethane	ug/L	50.0 U	50.0	4.6	09/15/17 11:39	M5
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
Methylene Chloride	ug/L	1.0 U	1.0	0.43	09/15/17 11:39	M5
Naphthalene	ug/L	2.0 U	2.0	0.11	09/15/17 11:39	M5
Styrene	ug/L	1.0 U	1.0	0.16	09/15/17 11:39	M5
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	09/15/17 11:39	M5
Toluene	ug/L	1.0 U	1.0	0.11	09/15/17 11:39	M5

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

METHOD BLANK: 1337451 Matrix: Water
Associated Lab Samples: 30229665001, 30229665003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	09/15/17 11:39	M5
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	09/15/17 11:39	M5
Trichloroethene	ug/L	1.0 U	1.0	0.22	09/15/17 11:39	M5
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	09/15/17 11:39	M5
Vinyl acetate	ug/L	10.0 U	10.0	0.15	09/15/17 11:39	M5
Vinyl chloride	ug/L	1.0 U	1.0	0.32	09/15/17 11:39	M5
Xylene (Total)	ug/L	3.0 U	3.0	0.77	09/15/17 11:39	M5
1,2-Dichloroethane-d4 (S)	%	98	80-120		09/15/17 11:39	M5
4-Bromofluorobenzene (S)	%	103	79-129		09/15/17 11:39	M5
Dibromofluoromethane (S)	%	98	80-120		09/15/17 11:39	M5
Toluene-d8 (S)	%	95	80-120		09/15/17 11:39	M5

LABORATORY CONTROL SAMPLE: 1337452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.8	99	70-130	M5
1,1,1-Trichloroethane	ug/L	20	19.3	96	70-130	M5
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	92	65-127	M5
1,1,2-Trichloroethane	ug/L	20	19.6	98	70-130	M5
1,1-Dichloroethane	ug/L	20	19.2	96	70-130	M5
1,1-Dichloroethene	ug/L	20	19.5	98	70-130	M5
1,2,3-Trichloropropane	ug/L	20	19.7	98	70-130	M5
1,2-Dibromo-3-chloropropane	ug/L	20	18.7	93	58-128	M5
1,2-Dibromoethane (EDB)	ug/L	20	19.7	98	70-130	M5
1,2-Dichlorobenzene	ug/L	20	19.6	98	70-130	M5
1,2-Dichloroethane	ug/L	20	19.8	99	70-130	M5
1,2-Dichloropropane	ug/L	20	19.5	98	70-130	M5
1,4-Dichlorobenzene	ug/L	20	19.6	98	70-130	M5
2-Butanone (MEK)	ug/L	20	17.5	87	72-170	M5
2-Hexanone	ug/L	20	17.0	85	65-151	M5
4-Methyl-2-pentanone (MIBK)	ug/L	20	18.6	93	66-150	M5
Acetone	ug/L	20	19.5	97	30-179	M5
Acrylonitrile	ug/L	20	18.3	91	48-172	M5
Benzene	ug/L	20	19.4	97	70-130	M5
Bromochloromethane	ug/L	20	22.8	114	70-130	M5
Bromodichloromethane	ug/L	20	17.9	89	70-130	M5
Bromoform	ug/L	20	18.5	92	70-130	M5
Bromomethane	ug/L	20	30.4	152	47-174	CH,M5
Carbon disulfide	ug/L	20	18.5	92	43-133	M5
Carbon tetrachloride	ug/L	20	18.7	94	56-143	M5
Chlorobenzene	ug/L	20	20.0	100	70-130	M5
Chloroethane	ug/L	20	18.1	91	67-139	M5
Chloroform	ug/L	20	19.0	95	70-130	M5

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(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

LABORATORY CONTROL SAMPLE: 1337452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	20	18.5	92	57-138	M5
cis-1,2-Dichloroethene	ug/L	20	19.8	99	70-130	M5
cis-1,3-Dichloropropene	ug/L	20	18.4	92	70-130	M5
Dibromochloromethane	ug/L	20	19.3	96	70-130	M5
Dibromomethane	ug/L	20	22.1	111	70-130	M5
Ethylbenzene	ug/L	20	20.2	101	70-130	M5
Iodomethane	ug/L	20	35.5J	177	10-175	L1,M5
Methyl-tert-butyl ether	ug/L	20	19.1	95	70-130	M5
Methylene Chloride	ug/L	20	21.4	107	55-144	M5
Naphthalene	ug/L	20	20.2	101	70-130	M5
Styrene	ug/L	20	19.4	97	70-130	M5
Tetrachloroethene	ug/L	20	21.0	105	70-130	M5
Toluene	ug/L	20	18.8	94	70-130	M5
trans-1,2-Dichloroethene	ug/L	20	19.8	99	70-130	M5
trans-1,3-Dichloropropene	ug/L	20	18.2	91	70-130	M5
trans-1,4-Dichloro-2-butene	ug/L	20	16.7	84	27-116	M5
Trichloroethene	ug/L	20	20.9	104	70-130	M5
Trichlorofluoromethane	ug/L	20	23.5	118	60-148	M5
Vinyl acetate	ug/L	20	15.2	76	30-181	M5
Vinyl chloride	ug/L	20	19.4	97	70-130	M5
Xylene (Total)	ug/L	60	58.5	98	70-130	M5
1,2-Dichloroethane-d4 (S)	%			96	80-120	M5
4-Bromofluorobenzene (S)	%			99	79-129	M5
Dibromofluoromethane (S)	%			104	80-120	M5
Toluene-d8 (S)	%			96	80-120	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

QC Batch: 271827 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30229665002, 30229665004, 30229665005, 30229665006, 30229665007, 30229665008

METHOD BLANK: 1337463 | Matrix: Water
Associated Lab Samples: 30229665002, 30229665004, 30229665005, 30229665006, 30229665007, 30229665008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	09/15/17 11:52	M5
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:52	M5
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	09/15/17 11:52	M5
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	09/15/17 11:52	M5
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	09/15/17 11:52	M5
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	09/15/17 11:52	M5
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	09/15/17 11:52	M5
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	09/15/17 11:52	M5
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	09/15/17 11:52	M5
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	09/15/17 11:52	M5
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	09/15/17 11:52	M5
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	09/15/17 11:52	M5
2-Hexanone	ug/L	10.0 U	10.0	0.26	09/15/17 11:52	M5
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	09/15/17 11:52	M5
Acetone	ug/L	10.0 U	10.0	2.9	09/15/17 11:52	M5
Acrylonitrile	ug/L	4.0 U	4.0	0.41	09/15/17 11:52	M5
Benzene	ug/L	1.0 U	1.0	0.18	09/15/17 11:52	M5
Bromochloromethane	ug/L	1.0 U	1.0	0.25	09/15/17 11:52	M5
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
Bromoform	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
Bromomethane	ug/L	1.0 U	1.0	0.64	09/15/17 11:52	M5
Carbon disulfide	ug/L	1.0 U	1.0	0.22	09/15/17 11:52	M5
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
Chlorobenzene	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
Chloroethane	ug/L	1.0 U	1.0	0.55	09/15/17 11:52	M5
Chloroform	ug/L	1.0 U	1.0	0.24	09/15/17 11:52	M5
Chloromethane	ug/L	1.0 U	1.0	0.19	09/15/17 11:52	M5
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	09/15/17 11:52	M5
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:52	M5
Dibromomethane	ug/L	1.0 U	1.0	0.37	09/15/17 11:52	M5
Ethylbenzene	ug/L	1.0 U	1.0	0.20	09/15/17 11:52	M5
Iodomethane	ug/L	50.0 U	50.0	4.6	09/15/17 11:52	M5
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
Methylene Chloride	ug/L	1.0 U	1.0	0.43	09/15/17 11:52	M5
Naphthalene	ug/L	2.0 U	2.0	0.11	09/15/17 11:52	M5
Styrene	ug/L	1.0 U	1.0	0.16	09/15/17 11:52	M5
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	09/15/17 11:52	M5
Toluene	ug/L	1.0 U	1.0	0.11	09/15/17 11:52	M5

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

METHOD BLANK: 1337463 Matrix: Water
Associated Lab Samples: 30229665002, 30229665004, 30229665005, 30229665006, 30229665007, 30229665008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	09/15/17 11:52	M5
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	09/15/17 11:52	M5
Trichloroethene	ug/L	1.0 U	1.0	0.22	09/15/17 11:52	M5
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	09/15/17 11:52	M5
Vinyl acetate	ug/L	10.0 U	10.0	0.15	09/15/17 11:52	M5
Vinyl chloride	ug/L	1.0 U	1.0	0.32	09/15/17 11:52	M5
Xylene (Total)	ug/L	3.0 U	3.0	0.77	09/15/17 11:52	M5
1,2-Dichloroethane-d4 (S)	%	98	80-120		09/15/17 11:52	M5
4-Bromofluorobenzene (S)	%	101	79-129		09/15/17 11:52	M5
Dibromofluoromethane (S)	%	98	80-120		09/15/17 11:52	M5
Toluene-d8 (S)	%	98	80-120		09/15/17 11:52	M5

LABORATORY CONTROL SAMPLE: 1337464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.4	97	70-130	M5
1,1,1-Trichloroethane	ug/L	20	19.7	98	70-130	M5
1,1,2,2-Tetrachloroethane	ug/L	20	18.4	92	65-127	M5
1,1,2-Trichloroethane	ug/L	20	19.3	97	70-130	M5
1,1-Dichloroethane	ug/L	20	19.8	99	70-130	M5
1,1-Dichloroethene	ug/L	20	20.4	102	70-130	M5
1,2,3-Trichloropropane	ug/L	20	20.0	100	70-130	M5
1,2-Dibromo-3-chloropropane	ug/L	20	19.3	96	58-128	M5
1,2-Dibromoethane (EDB)	ug/L	20	19.7	98	70-130	M5
1,2-Dichlorobenzene	ug/L	20	20.0	100	70-130	M5
1,2-Dichloroethane	ug/L	20	19.1	95	70-130	M5
1,2-Dichloropropane	ug/L	20	19.1	96	70-130	M5
1,4-Dichlorobenzene	ug/L	20	20.1	101	70-130	M5
2-Butanone (MEK)	ug/L	20	20.0	100	72-170	M5
2-Hexanone	ug/L	20	18.2	91	65-151	M5
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.9	100	66-150	M5
Acetone	ug/L	20	19.2	96	30-179	M5
Acrylonitrile	ug/L	20	17.3	87	48-172	M5
Benzene	ug/L	20	20.2	101	70-130	M5
Bromochloromethane	ug/L	20	22.5	112	70-130	M5
Bromodichloromethane	ug/L	20	17.9	90	70-130	M5
Bromoform	ug/L	20	18.4	92	70-130	M5
Bromomethane	ug/L	20	25.7	128	47-174	M5
Carbon disulfide	ug/L	20	18.0	90	43-133	M5
Carbon tetrachloride	ug/L	20	18.8	94	56-143	M5
Chlorobenzene	ug/L	20	19.7	98	70-130	M5
Chloroethane	ug/L	20	18.1	91	67-139	M5
Chloroform	ug/L	20	19.0	95	70-130	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

LABORATORY CONTROL SAMPLE: 1337464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	20	19.1	95	57-138	M5
cis-1,2-Dichloroethene	ug/L	20	19.4	97	70-130	M5
cis-1,3-Dichloropropene	ug/L	20	18.9	94	70-130	M5
Dibromochloromethane	ug/L	20	18.7	94	70-130	M5
Dibromomethane	ug/L	20	21.8	109	70-130	M5
Ethylbenzene	ug/L	20	19.2	96	70-130	M5
Iodomethane	ug/L	20	28.8J	144	10-175	M5
Methyl-tert-butyl ether	ug/L	20	19.1	96	70-130	M5
Methylene Chloride	ug/L	20	19.8	99	55-144	M5
Naphthalene	ug/L	20	19.5	98	70-130	M5
Styrene	ug/L	20	18.9	95	70-130	M5
Tetrachloroethene	ug/L	20	20.9	105	70-130	M5
Toluene	ug/L	20	18.9	94	70-130	M5
trans-1,2-Dichloroethene	ug/L	20	19.7	98	70-130	M5
trans-1,3-Dichloropropene	ug/L	20	18.4	92	70-130	M5
trans-1,4-Dichloro-2-butene	ug/L	20	17.8	89	27-116	M5
Trichloroethene	ug/L	20	21.2	106	70-130	M5
Trichlorofluoromethane	ug/L	20	22.4	112	60-148	M5
Vinyl acetate	ug/L	20	15.3	76	30-181	M5
Vinyl chloride	ug/L	20	20.3	102	70-130	M5
Xylene (Total)	ug/L	60	58.9	98	70-130	M5
1,2-Dichloroethane-d4 (S)	%			92	80-120	M5
4-Bromofluorobenzene (S)	%			100	79-129	M5
Dibromofluoromethane (S)	%			102	80-120	M5
Toluene-d8 (S)	%			97	80-120	M5

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.

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QUALIFIERS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: 271824

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 271827

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229665

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30229665001	**Trip Blank**	EPA 8260B	271824		
30229665002	**CO104-PZMXXX**	EPA 8260B	271827		
30229665003	**CO103-PZMXXX**	EPA 8260B	271824		
30229665004	**CO30-PZM015**	EPA 8260B	271827		
30229665005	**CO30-PZM060**	EPA 8260B	271827		
30229665006	**CO102-PZMXXX**	EPA 8260B	271827		
30229665007	**CO02-PZM006**	EPA 8260B	271827		
30229665008	**CO18-PZM006**	EPA 8260B	271827		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

8 23

Page: / of /

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	EnviroAnalytics Group	Report To:	James Calenda	Attention:	Laura Sargent
Address:	1430 Sparrows Point Blvd	Copy To:		Company Name:	EnviroAnalytics Group
	Sparrows Point, MD 21219			Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Email To:	jcalenda@enviroanalyticsgroup.com	PO Number:		Pace Quote Reference:	
Phone: 314-620-3056	Fax:	Project Name:	Coke Oven 3rd Quarter	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:		Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MD

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	DI Water	Analysis Test (Y/N)	VOC/8260B	SVOC 8270D	DRO/8015B	GRO/8015B	METALS/6010C	Mercury/7471A or 7470A	Hexavalent Chromium/7196A	Total Cyanide/9012A	PCB/8082 (soil)		Oil and Grease/1664A (ac	Oil and Grease/9071B (soil)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank	WT	G			9/11	17		2				2						X													001
2	C0104-PZM XXX						0926		3				3						X													002
3	C0103-Pzm xxx						1021		3				3						X													003
4	C030-PZM015						1110		3				3						X													004
5	C030-PZM060						1148		3				3						X													005
6	C0102-PZMXXX						1329		3				3						X													006
7	C002-PZM006						1432		3				3						X													007
8	C018-PZM006						1516		3				3						X													008
9																																
10																																
11																																
12																																

WO#:30229665

30229665

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Data Package Required? (Y/N):	[signature]	9/11/17	1610	David L Hillegas/Pace	9/11/17	1635				
Data Validation Required? (Y/N):	David L Hillegas/Pace	9/11/17	1924	[signature]	9/11/17	1930				
If data package is required, attach data package checklist.	[signature]	9/11/17	2316	Ashleigh Paul/Pace	9-11-17	2318	38	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Leandra M. Glumac

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 09/11/17

*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.

F-ALL-Q-020rev.06, 2-Feb-2007

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EnviroAna. Project # 30229665

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label AM
LIMS Login BLM

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 6 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.8 °C Correction Factor: +0.0 °C Final Temp: 3.8 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AM 9-12-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID Matrix: WW				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:	X			8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.
Organic Samples checked for dechlorination:			X	14.
Filtered volume received for Dissolved tests			X	15.
All containers have been checked for preservation.			X	16.
All containers needing preservation are found to be in compliance with EPA recommendation.			X	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		X		17.
Trip Blank Present:	X			18.
Trip Blank Custody Seals Present	X			
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed: / Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

September 22, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
1600 Sparrows Point Blvd
Suite B2
Sparrows Point, MD 21219

RE: Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on September 14, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project:	Coke Oven 3rd Quarter
Pace Project No.:	30230067

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30230067001	**Trip Blank**	Water	09/14/17 00:01	09/14/17 23:30
30230067002	**CO60-PZP001**	Water	09/14/17 08:38	09/14/17 23:30
30230067003	**CO26-PZM007**	Water	09/14/17 09:30	09/14/17 23:30
30230067004	**CO58-PZM001**	Water	09/14/17 10:03	09/14/17 23:30
30230067005	**CO57-PZP002**	Water	09/14/17 10:44	09/14/17 23:30
30230067006	**CO55-PZM000**	Water	09/14/17 11:23	09/14/17 23:30
30230067007	**CO56-PZP001**	Water	09/14/17 12:30	09/14/17 23:30
30230067008	**CO59-PZP002**	Water	09/14/17 13:09	09/14/17 23:30
30230067009	**CO23-PZM008**	Water	09/14/17 14:06	09/14/17 23:30
30230067010	**CO24-PZM007**	Water	09/14/17 14:52	09/14/17 23:30

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SAMPLE ANALYTE COUNT

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30230067001	**Trip Blank**	EPA 8260B	MAK	53	PASI-PA
30230067002	**CO60-PZP001**	EPA 8260B	MAK	53	PASI-PA
30230067003	**CO26-PZM007**	EPA 8260B	MAK	53	PASI-PA
30230067004	**CO58-PZM001**	EPA 8260B	MAK	53	PASI-PA
30230067005	**CO57-PZP002**	EPA 8260B	MAK	53	PASI-PA
30230067006	**CO55-PZM000**	EPA 8260B	MAK	53	PASI-PA
30230067007	**CO56-PZP001**	EPA 8260B	MAK	53	PASI-PA
30230067008	**CO59-PZP002**	EPA 8260B	MAK	53	PASI-PA
30230067009	**CO23-PZM008**	EPA 8260B	MAK	53	PASI-PA
30230067010	**CO24-PZM007**	EPA 8260B	MAK	53	PASI-PA

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: Trip Blank **Lab ID: 30230067001** Collected: 09/14/17 00:01 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 12:42	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 12:42	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:42	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 12:42	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 12:42	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 12:42	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 12:42	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 12:42	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 12:42	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:42	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 12:42	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:42	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 12:42	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 12:42	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 12:42	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 12:42	108-10-1	M5
Acetone	ND	ug/L	5.0	2.9	1		09/15/17 12:42	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 12:42	107-13-1	M5
Benzene	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 12:42	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 12:42	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:42	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:42	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 12:42	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 12:42	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:42	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:42	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 12:42	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 12:42	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 12:42	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 12:42	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 12:42	74-95-3	M5
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		09/15/17 12:42	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 12:42	74-88-4	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:42	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 12:42	75-09-2	M5
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		09/15/17 12:42	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/15/17 12:42	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 12:42	127-18-4	M5
Toluene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:42	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 12:42	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 12:42	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 12:42	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 12:42	75-01-4	M5
Xylene (Total)	ND	ug/L	1.0	0.77	1		09/15/17 12:42	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 12:42	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:42	10061-01-5	M5

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: Trip Blank **Lab ID: 30230067001** Collected: 09/14/17 00:01 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:42	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:42	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 12:42	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		1		09/15/17 12:42	460-00-4	M5
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		09/15/17 12:42	17060-07-0	M5
Toluene-d8 (S)	96	%	80-120		1		09/15/17 12:42	2037-26-5	M5
Dibromofluoromethane (S)	100	%	80-120		1		09/15/17 12:42	1868-53-7	M5

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO60-PZP001 **Lab ID: 30230067002** Collected: 09/14/17 08:38 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/19/17 20:11	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 20:11	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:11	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/19/17 20:11	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/19/17 20:11	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/19/17 20:11	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/19/17 20:11	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/19/17 20:11	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 20:11	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:11	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/19/17 20:11	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 20:11	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/19/17 20:11	106-46-7	M5
2-Butanone (MEK)	**5.1J**	ug/L	5.0	0.31	1		09/19/17 20:11	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/19/17 20:11	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/19/17 20:11	108-10-1	M5
Acetone	**84.9**	ug/L	5.0	2.9	1		09/19/17 20:11	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/19/17 20:11	107-13-1	M5
Benzene	**260**	ug/L	1.0	0.18	1		09/19/17 20:11	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 20:11	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:11	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:11	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/19/17 20:11	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 20:11	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:11	56-23-5	M5
Chlorobenzene	**0.56J**	ug/L	1.0	0.17	1		09/19/17 20:11	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/19/17 20:11	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/19/17 20:11	67-66-3	M5
Chloromethane	**1.1**	ug/L	1.0	0.19	1		09/19/17 20:11	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 20:11	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/19/17 20:11	74-95-3	M5
Ethylbenzene	**7.1**	ug/L	1.0	0.20	1		09/19/17 20:11	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/19/17 20:11	74-88-4	CL,M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:11	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/19/17 20:11	75-09-2	M5
Naphthalene	**1000**	ug/L	40.0	2.2	20		09/20/17 23:25	91-20-3	M5
Styrene	**17.6**	ug/L	1.0	0.16	1		09/19/17 20:11	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/19/17 20:11	127-18-4	M5
Toluene	**33.8**	ug/L	1.0	0.11	1		09/19/17 20:11	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 20:11	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/19/17 20:11	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/19/17 20:11	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/19/17 20:11	75-01-4	M5
Xylene (Total)	**140**	ug/L	1.0	0.77	1		09/19/17 20:11	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 20:11	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:11	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO60-PZP001 **Lab ID: 30230067002** Collected: 09/14/17 08:38 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 20:11	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:11	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/19/17 20:11	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	104	%	79-129		1		09/19/17 20:11	460-00-4	M5
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		09/19/17 20:11	17060-07-0	M5
Toluene-d8 (S)	93	%	80-120		1		09/19/17 20:11	2037-26-5	M5
Dibromofluoromethane (S)	102	%	80-120		1		09/19/17 20:11	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO26-PZM007 **Lab ID: 30230067003** Collected: 09/14/17 09:30 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/19/17 20:37	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 20:37	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:37	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/19/17 20:37	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/19/17 20:37	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/19/17 20:37	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/19/17 20:37	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/19/17 20:37	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 20:37	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:37	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/19/17 20:37	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 20:37	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/19/17 20:37	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/19/17 20:37	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/19/17 20:37	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/19/17 20:37	108-10-1	M5
Acetone	**38.7**	ug/L	5.0	2.9	1		09/19/17 20:37	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/19/17 20:37	107-13-1	M5
Benzene	**351**	ug/L	1.0	0.18	1		09/19/17 20:37	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 20:37	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:37	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:37	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/19/17 20:37	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 20:37	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:37	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:37	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/19/17 20:37	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/19/17 20:37	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 20:37	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 20:37	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/19/17 20:37	74-95-3	M5
Ethylbenzene	**11.3**	ug/L	1.0	0.20	1		09/19/17 20:37	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/19/17 20:37	74-88-4	CL,M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:37	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/19/17 20:37	75-09-2	M5
Naphthalene	**2390**	ug/L	40.0	2.2	20		09/20/17 23:38	91-20-3	M5
Styrene	**69.5**	ug/L	1.0	0.16	1		09/19/17 20:37	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/19/17 20:37	127-18-4	M5
Toluene	**202**	ug/L	1.0	0.11	1		09/19/17 20:37	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 20:37	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/19/17 20:37	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/19/17 20:37	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/19/17 20:37	75-01-4	M5
Xylene (Total)	**242**	ug/L	1.0	0.77	1		09/19/17 20:37	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 20:37	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:37	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO26-PZM007 **Lab ID: 30230067003** Collected: 09/14/17 09:30 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 20:37	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:37	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/19/17 20:37	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	102	%	79-129		1		09/19/17 20:37	460-00-4	M5
1,2-Dichloroethane-d4 (S)	95	%	80-120		1		09/19/17 20:37	17060-07-0	M5
Toluene-d8 (S)	95	%	80-120		1		09/19/17 20:37	2037-26-5	M5
Dibromofluoromethane (S)	99	%	80-120		1		09/19/17 20:37	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO58-PZM001 **Lab ID: 30230067004** Collected: 09/14/17 10:03 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/19/17 21:02	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 21:02	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 21:02	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/19/17 21:02	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/19/17 21:02	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/19/17 21:02	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/19/17 21:02	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/19/17 21:02	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 21:02	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 21:02	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/19/17 21:02	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 21:02	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/19/17 21:02	106-46-7	M5
2-Butanone (MEK)	**5.1J**	ug/L	5.0	0.31	1		09/19/17 21:02	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/19/17 21:02	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/19/17 21:02	108-10-1	M5
Acetone	**56.2**	ug/L	5.0	2.9	1		09/19/17 21:02	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/19/17 21:02	107-13-1	M5
Benzene	**256**	ug/L	1.0	0.18	1		09/19/17 21:02	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 21:02	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 21:02	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 21:02	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/19/17 21:02	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 21:02	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 21:02	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 21:02	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/19/17 21:02	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/19/17 21:02	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 21:02	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 21:02	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/19/17 21:02	74-95-3	M5
Ethylbenzene	**12.4**	ug/L	1.0	0.20	1		09/19/17 21:02	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/19/17 21:02	74-88-4	CL,M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 21:02	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/19/17 21:02	75-09-2	M5
Naphthalene	**1980**	ug/L	40.0	2.2	20		09/20/17 23:51	91-20-3	M5
Styrene	**38.5**	ug/L	1.0	0.16	1		09/19/17 21:02	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/19/17 21:02	127-18-4	M5
Toluene	**106**	ug/L	1.0	0.11	1		09/19/17 21:02	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 21:02	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/19/17 21:02	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/19/17 21:02	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/19/17 21:02	75-01-4	M5
Xylene (Total)	**213**	ug/L	1.0	0.77	1		09/19/17 21:02	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 21:02	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 21:02	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO58-PZM001 **Lab ID: 30230067004** Collected: 09/14/17 10:03 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 21:02	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 21:02	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/19/17 21:02	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	105	%	79-129		1		09/19/17 21:02	460-00-4	M5
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		09/19/17 21:02	17060-07-0	M5
Toluene-d8 (S)	94	%	80-120		1		09/19/17 21:02	2037-26-5	M5
Dibromofluoromethane (S)	104	%	80-120		1		09/19/17 21:02	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO57-PZP002 **Lab ID: 30230067005** Collected: 09/14/17 10:44 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/19/17 20:49	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 20:49	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:49	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/19/17 20:49	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/19/17 20:49	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/19/17 20:49	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/19/17 20:49	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/19/17 20:49	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 20:49	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:49	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/19/17 20:49	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 20:49	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/19/17 20:49	106-46-7	M5
2-Butanone (MEK)	**6.9J**	ug/L	5.0	0.31	1		09/19/17 20:49	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/19/17 20:49	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/19/17 20:49	108-10-1	M5
Acetone	**120**	ug/L	5.0	2.9	1		09/19/17 20:49	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/19/17 20:49	107-13-1	M5
Benzene	**1.0 U**	ug/L	1.0	0.18	1		09/19/17 20:49	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 20:49	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:49	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:49	75-25-2	M5
Bromomethane	**1.1**	ug/L	1.0	0.64	1		09/19/17 20:49	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 20:49	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:49	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:49	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/19/17 20:49	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/19/17 20:49	67-66-3	M5
Chloromethane	**1.5**	ug/L	1.0	0.19	1		09/19/17 20:49	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 20:49	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/19/17 20:49	74-95-3	M5
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		09/19/17 20:49	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/19/17 20:49	74-88-4	CL,M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:49	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/19/17 20:49	75-09-2	M5
Naphthalene	**4.2**	ug/L	2.0	0.11	1		09/19/17 20:49	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/19/17 20:49	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/19/17 20:49	127-18-4	M5
Toluene	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 20:49	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 20:49	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/19/17 20:49	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/19/17 20:49	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/19/17 20:49	75-01-4	M5
Xylene (Total)	ND	ug/L	1.0	0.77	1		09/19/17 20:49	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 20:49	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:49	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO57-PZP002 **Lab ID: 30230067005** Collected: 09/14/17 10:44 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 20:49	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:49	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/19/17 20:49	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	103	%	79-129		1		09/19/17 20:49	460-00-4	M5
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		09/19/17 20:49	17060-07-0	M5
Toluene-d8 (S)	96	%	80-120		1		09/19/17 20:49	2037-26-5	M5
Dibromofluoromethane (S)	102	%	80-120		1		09/19/17 20:49	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO55-PZM000 **Lab ID: 30230067006** Collected: 09/14/17 11:23 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/19/17 20:24	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 20:24	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:24	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/19/17 20:24	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/19/17 20:24	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/19/17 20:24	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/19/17 20:24	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/19/17 20:24	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 20:24	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:24	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/19/17 20:24	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 20:24	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/19/17 20:24	106-46-7	M5
2-Butanone (MEK)	**81.5**	ug/L	5.0	0.31	1		09/19/17 20:24	78-93-3	M5
2-Hexanone	**25.6**	ug/L	5.0	0.26	1		09/19/17 20:24	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/19/17 20:24	108-10-1	M5
Acetone	**372**	ug/L	25.0	14.6	5		09/21/17 00:03	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/19/17 20:24	107-13-1	M5
Benzene	**11.8**	ug/L	1.0	0.18	1		09/19/17 20:24	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 20:24	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:24	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:24	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/19/17 20:24	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 20:24	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:24	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:24	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/19/17 20:24	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/19/17 20:24	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 20:24	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 20:24	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/19/17 20:24	74-95-3	M5
Ethylbenzene	**0.53J**	ug/L	1.0	0.20	1		09/19/17 20:24	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/19/17 20:24	74-88-4	CL,M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:24	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/19/17 20:24	75-09-2	M5
Naphthalene	**91.7**	ug/L	2.0	0.11	1		09/19/17 20:24	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/19/17 20:24	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/19/17 20:24	127-18-4	M5
Toluene	**6.0**	ug/L	1.0	0.11	1		09/19/17 20:24	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 20:24	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/19/17 20:24	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/19/17 20:24	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/19/17 20:24	75-01-4	M5
Xylene (Total)	**8.6**	ug/L	1.0	0.77	1		09/19/17 20:24	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 20:24	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 20:24	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO55-PZM000 **Lab ID: 30230067006** Collected: 09/14/17 11:23 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 20:24	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 20:24	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/19/17 20:24	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	105	%	79-129		1		09/19/17 20:24	460-00-4	M5
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		09/19/17 20:24	17060-07-0	M5
Toluene-d8 (S)	95	%	80-120		1		09/19/17 20:24	2037-26-5	M5
Dibromofluoromethane (S)	101	%	80-120		1		09/19/17 20:24	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO56-PZP001 **Lab ID: 30230067007** Collected: 09/14/17 12:30 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/19/17 21:14	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/19/17 21:14	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/19/17 21:14	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/19/17 21:14	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/19/17 21:14	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/19/17 21:14	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/19/17 21:14	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/19/17 21:14	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/19/17 21:14	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/19/17 21:14	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/19/17 21:14	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/19/17 21:14	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/19/17 21:14	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/19/17 21:14	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/19/17 21:14	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/19/17 21:14	108-10-1	M5
Acetone	**109**	ug/L	25.0	14.6	5		09/19/17 21:14	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/19/17 21:14	107-13-1	M5
Benzene	**385**	ug/L	5.0	0.89	5		09/19/17 21:14	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/19/17 21:14	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/19/17 21:14	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/19/17 21:14	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/19/17 21:14	74-83-9	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/19/17 21:14	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/19/17 21:14	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/19/17 21:14	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/19/17 21:14	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/19/17 21:14	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/19/17 21:14	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/19/17 21:14	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/19/17 21:14	74-95-3	M5
Ethylbenzene	**14.3**	ug/L	5.0	0.98	5		09/19/17 21:14	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/19/17 21:14	74-88-4	CL,M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/19/17 21:14	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/19/17 21:14	75-09-2	M5
Naphthalene	**3440**	ug/L	200	11.1	100		09/19/17 21:40	91-20-3	M5
Styrene	**63.0**	ug/L	5.0	0.81	5		09/19/17 21:14	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/19/17 21:14	127-18-4	M5
Toluene	**103**	ug/L	5.0	0.55	5		09/19/17 21:14	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/19/17 21:14	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/19/17 21:14	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/19/17 21:14	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/19/17 21:14	75-01-4	M5
Xylene (Total)	**282**	ug/L	5.0	3.8	5		09/19/17 21:14	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/19/17 21:14	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/19/17 21:14	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO56-PZP001 **Lab ID: 30230067007** Collected: 09/14/17 12:30 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/19/17 21:14	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/19/17 21:14	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/19/17 21:14	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	104	%	79-129		5		09/19/17 21:14	460-00-4	M5
1,2-Dichloroethane-d4 (S)	99	%	80-120		5		09/19/17 21:14	17060-07-0	M5
Toluene-d8 (S)	95	%	80-120		5		09/19/17 21:14	2037-26-5	M5
Dibromofluoromethane (S)	102	%	80-120		5		09/19/17 21:14	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO59-PZP002 **Lab ID: 30230067008** Collected: 09/14/17 13:09 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/19/17 19:59	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 19:59	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 19:59	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/19/17 19:59	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/19/17 19:59	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/19/17 19:59	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/19/17 19:59	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/19/17 19:59	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 19:59	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 19:59	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/19/17 19:59	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 19:59	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/19/17 19:59	106-46-7	M5
2-Butanone (MEK)	**5.9J**	ug/L	5.0	0.31	1		09/19/17 19:59	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/19/17 19:59	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/19/17 19:59	108-10-1	M5
Acetone	**64.5**	ug/L	5.0	2.9	1		09/19/17 19:59	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/19/17 19:59	107-13-1	M5
Benzene	**1.0 U**	ug/L	1.0	0.18	1		09/19/17 19:59	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 19:59	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 19:59	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 19:59	75-25-2	M5
Bromomethane	**1.7**	ug/L	1.0	0.64	1		09/19/17 19:59	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 19:59	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 19:59	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 19:59	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/19/17 19:59	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/19/17 19:59	67-66-3	M5
Chloromethane	**1.4**	ug/L	1.0	0.19	1		09/19/17 19:59	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 19:59	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/19/17 19:59	74-95-3	M5
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		09/19/17 19:59	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/19/17 19:59	74-88-4	CL,M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 19:59	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/19/17 19:59	75-09-2	M5
Naphthalene	**1.3J**	ug/L	2.0	0.11	1		09/19/17 19:59	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/19/17 19:59	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/19/17 19:59	127-18-4	M5
Toluene	**0.37J**	ug/L	1.0	0.11	1		09/19/17 19:59	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 19:59	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/19/17 19:59	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/19/17 19:59	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/19/17 19:59	75-01-4	M5
Xylene (Total)	**2.9J**	ug/L	1.0	0.77	1		09/19/17 19:59	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 19:59	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 19:59	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO59-PZP002 **Lab ID: 30230067008** Collected: 09/14/17 13:09 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 19:59	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 19:59	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/19/17 19:59	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	103	%	79-129		1		09/19/17 19:59	460-00-4	M5
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		09/19/17 19:59	17060-07-0	M5
Toluene-d8 (S)	97	%	80-120		1		09/19/17 19:59	2037-26-5	M5
Dibromofluoromethane (S)	101	%	80-120		1		09/19/17 19:59	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO23-PZM008 **Lab ID: 30230067009** Collected: 09/14/17 14:06 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/19/17 22:05	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/19/17 22:05	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/19/17 22:05	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/19/17 22:05	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/19/17 22:05	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/19/17 22:05	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/19/17 22:05	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/19/17 22:05	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/19/17 22:05	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/19/17 22:05	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/19/17 22:05	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/19/17 22:05	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/19/17 22:05	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/19/17 22:05	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/19/17 22:05	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/19/17 22:05	108-10-1	M5
Acetone	**67.7**	ug/L	25.0	14.6	5		09/19/17 22:05	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/19/17 22:05	107-13-1	M5
Benzene	**564**	ug/L	5.0	0.89	5		09/19/17 22:05	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/19/17 22:05	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/19/17 22:05	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/19/17 22:05	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/19/17 22:05	74-83-9	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/19/17 22:05	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/19/17 22:05	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/19/17 22:05	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/19/17 22:05	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/19/17 22:05	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/19/17 22:05	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/19/17 22:05	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/19/17 22:05	74-95-3	M5
Ethylbenzene	**23.2**	ug/L	5.0	0.98	5		09/19/17 22:05	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/19/17 22:05	74-88-4	CL,M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/19/17 22:05	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/19/17 22:05	75-09-2	M5
Naphthalene	**4260**	ug/L	200	11.1	100		09/19/17 22:30	91-20-3	M5
Styrene	**19.8**	ug/L	5.0	0.81	5		09/19/17 22:05	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/19/17 22:05	127-18-4	M5
Toluene	**217**	ug/L	5.0	0.55	5		09/19/17 22:05	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/19/17 22:05	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/19/17 22:05	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/19/17 22:05	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/19/17 22:05	75-01-4	M5
Xylene (Total)	**373**	ug/L	5.0	3.8	5		09/19/17 22:05	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/19/17 22:05	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/19/17 22:05	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO23-PZM008 **Lab ID: 30230067009** Collected: 09/14/17 14:06 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/19/17 22:05	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/19/17 22:05	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/19/17 22:05	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	103	%	79-129		5		09/19/17 22:05	460-00-4	M5
1,2-Dichloroethane-d4 (S)	96	%	80-120		5		09/19/17 22:05	17060-07-0	M5
Toluene-d8 (S)	96	%	80-120		5		09/19/17 22:05	2037-26-5	M5
Dibromofluoromethane (S)	101	%	80-120		5		09/19/17 22:05	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO24-PZM007 **Lab ID: 30230067010** Collected: 09/14/17 14:52 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/19/17 21:27	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 21:27	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 21:27	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/19/17 21:27	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/19/17 21:27	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/19/17 21:27	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/19/17 21:27	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/19/17 21:27	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 21:27	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 21:27	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/19/17 21:27	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 21:27	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/19/17 21:27	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/19/17 21:27	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/19/17 21:27	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/19/17 21:27	108-10-1	M5
Acetone	**47.8**	ug/L	5.0	2.9	1		09/19/17 21:27	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/19/17 21:27	107-13-1	M5
Benzene	**5.1**	ug/L	1.0	0.18	1		09/19/17 21:27	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/19/17 21:27	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 21:27	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 21:27	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/19/17 21:27	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 21:27	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 21:27	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 21:27	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/19/17 21:27	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/19/17 21:27	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 21:27	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/19/17 21:27	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/19/17 21:27	74-95-3	M5
Ethylbenzene	**7.4**	ug/L	1.0	0.20	1		09/19/17 21:27	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/19/17 21:27	74-88-4	CL,M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 21:27	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/19/17 21:27	75-09-2	M5
Naphthalene	**4160**	ug/L	100	5.6	50		09/19/17 21:52	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/19/17 21:27	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/19/17 21:27	127-18-4	M5
Toluene	**3.5**	ug/L	1.0	0.11	1		09/19/17 21:27	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/19/17 21:27	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/19/17 21:27	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/19/17 21:27	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/19/17 21:27	75-01-4	M5
Xylene (Total)	**13.0**	ug/L	1.0	0.77	1		09/19/17 21:27	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/19/17 21:27	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/19/17 21:27	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Sample: CO24-PZM007 **Lab ID: 30230067010** Collected: 09/14/17 14:52 Received: 09/14/17 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/19/17 21:27	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/19/17 21:27	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/19/17 21:27	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	102	%	79-129		1		09/19/17 21:27	460-00-4	M5
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		09/19/17 21:27	17060-07-0	M5
Toluene-d8 (S)	94	%	80-120		1		09/19/17 21:27	2037-26-5	M5
Dibromofluoromethane (S)	104	%	80-120		1		09/19/17 21:27	1868-53-7	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

QC Batch: 271827 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30230067001

METHOD BLANK: 1337463 | Matrix: Water
Associated Lab Samples: 30230067001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	09/15/17 11:52	M5
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:52	M5
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	09/15/17 11:52	M5
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	09/15/17 11:52	M5
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	09/15/17 11:52	M5
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	09/15/17 11:52	M5
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	09/15/17 11:52	M5
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	09/15/17 11:52	M5
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	09/15/17 11:52	M5
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	09/15/17 11:52	M5
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	09/15/17 11:52	M5
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	09/15/17 11:52	M5
2-Hexanone	ug/L	10.0 U	10.0	0.26	09/15/17 11:52	M5
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	09/15/17 11:52	M5
Acetone	ug/L	10.0 U	10.0	2.9	09/15/17 11:52	M5
Acrylonitrile	ug/L	4.0 U	4.0	0.41	09/15/17 11:52	M5
Benzene	ug/L	1.0 U	1.0	0.18	09/15/17 11:52	M5
Bromochloromethane	ug/L	1.0 U	1.0	0.25	09/15/17 11:52	M5
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
Bromoform	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
Bromomethane	ug/L	1.0 U	1.0	0.64	09/15/17 11:52	M5
Carbon disulfide	ug/L	1.0 U	1.0	0.22	09/15/17 11:52	M5
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
Chlorobenzene	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
Chloroethane	ug/L	1.0 U	1.0	0.55	09/15/17 11:52	M5
Chloroform	ug/L	1.0 U	1.0	0.24	09/15/17 11:52	M5
Chloromethane	ug/L	1.0 U	1.0	0.19	09/15/17 11:52	M5
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	09/15/17 11:52	M5
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:52	M5
Dibromomethane	ug/L	1.0 U	1.0	0.37	09/15/17 11:52	M5
Ethylbenzene	ug/L	1.0 U	1.0	0.20	09/15/17 11:52	M5
Iodomethane	ug/L	50.0 U	50.0	4.6	09/15/17 11:52	M5
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
Methylene Chloride	ug/L	1.0 U	1.0	0.43	09/15/17 11:52	M5
Naphthalene	ug/L	2.0 U	2.0	0.11	09/15/17 11:52	M5
Styrene	ug/L	1.0 U	1.0	0.16	09/15/17 11:52	M5
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	09/15/17 11:52	M5
Toluene	ug/L	1.0 U	1.0	0.11	09/15/17 11:52	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

METHOD BLANK: 1337463 Matrix: Water
Associated Lab Samples: 30230067001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	09/15/17 11:52	M5
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	09/15/17 11:52	M5
Trichloroethene	ug/L	1.0 U	1.0	0.22	09/15/17 11:52	M5
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	09/15/17 11:52	M5
Vinyl acetate	ug/L	10.0 U	10.0	0.15	09/15/17 11:52	M5
Vinyl chloride	ug/L	1.0 U	1.0	0.32	09/15/17 11:52	M5
Xylene (Total)	ug/L	3.0 U	3.0	0.77	09/15/17 11:52	M5
1,2-Dichloroethane-d4 (S)	%	98	80-120		09/15/17 11:52	M5
4-Bromofluorobenzene (S)	%	101	79-129		09/15/17 11:52	M5
Dibromofluoromethane (S)	%	98	80-120		09/15/17 11:52	M5
Toluene-d8 (S)	%	98	80-120		09/15/17 11:52	M5

LABORATORY CONTROL SAMPLE: 1337464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.4	97	70-130	M5
1,1,1-Trichloroethane	ug/L	20	19.7	98	70-130	M5
1,1,2,2-Tetrachloroethane	ug/L	20	18.4	92	65-127	M5
1,1,2-Trichloroethane	ug/L	20	19.3	97	70-130	M5
1,1-Dichloroethane	ug/L	20	19.8	99	70-130	M5
1,1-Dichloroethene	ug/L	20	20.4	102	70-130	M5
1,2,3-Trichloropropane	ug/L	20	20.0	100	70-130	M5
1,2-Dibromo-3-chloropropane	ug/L	20	19.3	96	58-128	M5
1,2-Dibromoethane (EDB)	ug/L	20	19.7	98	70-130	M5
1,2-Dichlorobenzene	ug/L	20	20.0	100	70-130	M5
1,2-Dichloroethane	ug/L	20	19.1	95	70-130	M5
1,2-Dichloropropane	ug/L	20	19.1	96	70-130	M5
1,4-Dichlorobenzene	ug/L	20	20.1	101	70-130	M5
2-Butanone (MEK)	ug/L	20	20.0	100	72-170	M5
2-Hexanone	ug/L	20	18.2	91	65-151	M5
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.9	100	66-150	M5
Acetone	ug/L	20	19.2	96	30-179	M5
Acrylonitrile	ug/L	20	17.3	87	48-172	M5
Benzene	ug/L	20	20.2	101	70-130	M5
Bromochloromethane	ug/L	20	22.5	112	70-130	M5
Bromodichloromethane	ug/L	20	17.9	90	70-130	M5
Bromoform	ug/L	20	18.4	92	70-130	M5
Bromomethane	ug/L	20	25.7	128	47-174	M5
Carbon disulfide	ug/L	20	18.0	90	43-133	M5
Carbon tetrachloride	ug/L	20	18.8	94	56-143	M5
Chlorobenzene	ug/L	20	19.7	98	70-130	M5
Chloroethane	ug/L	20	18.1	91	67-139	M5
Chloroform	ug/L	20	19.0	95	70-130	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

LABORATORY CONTROL SAMPLE: 1337464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	20	19.1	95	57-138	M5
cis-1,2-Dichloroethene	ug/L	20	19.4	97	70-130	M5
cis-1,3-Dichloropropene	ug/L	20	18.9	94	70-130	M5
Dibromochloromethane	ug/L	20	18.7	94	70-130	M5
Dibromomethane	ug/L	20	21.8	109	70-130	M5
Ethylbenzene	ug/L	20	19.2	96	70-130	M5
Iodomethane	ug/L	20	28.8J	144	10-175	M5
Methyl-tert-butyl ether	ug/L	20	19.1	96	70-130	M5
Methylene Chloride	ug/L	20	19.8	99	55-144	M5
Naphthalene	ug/L	20	19.5	98	70-130	M5
Styrene	ug/L	20	18.9	95	70-130	M5
Tetrachloroethene	ug/L	20	20.9	105	70-130	M5
Toluene	ug/L	20	18.9	94	70-130	M5
trans-1,2-Dichloroethene	ug/L	20	19.7	98	70-130	M5
trans-1,3-Dichloropropene	ug/L	20	18.4	92	70-130	M5
trans-1,4-Dichloro-2-butene	ug/L	20	17.8	89	27-116	M5
Trichloroethene	ug/L	20	21.2	106	70-130	M5
Trichlorofluoromethane	ug/L	20	22.4	112	60-148	M5
Vinyl acetate	ug/L	20	15.3	76	30-181	M5
Vinyl chloride	ug/L	20	20.3	102	70-130	M5
Xylene (Total)	ug/L	60	58.9	98	70-130	M5
1,2-Dichloroethane-d4 (S)	%			92	80-120	M5
4-Bromofluorobenzene (S)	%			100	79-129	M5
Dibromofluoromethane (S)	%			102	80-120	M5
Toluene-d8 (S)	%			97	80-120	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

QC Batch: 272290 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30230067002, 30230067003, 30230067004, 30230067010

METHOD BLANK: 1339522 | Matrix: Water
Associated Lab Samples: 30230067002, 30230067003, 30230067004, 30230067010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	09/19/17 12:58	M5
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	09/19/17 12:58	M5
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	09/19/17 12:58	M5
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	09/19/17 12:58	M5
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	09/19/17 12:58	M5
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	09/19/17 12:58	M5
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	09/19/17 12:58	M5
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	09/19/17 12:58	M5
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	09/19/17 12:58	M5
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	09/19/17 12:58	M5
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	09/19/17 12:58	M5
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	09/19/17 12:58	M5
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	09/19/17 12:58	M5
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	09/19/17 12:58	M5
2-Hexanone	ug/L	10.0 U	10.0	0.26	09/19/17 12:58	M5
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	09/19/17 12:58	M5
Acetone	ug/L	10.0 U	10.0	2.9	09/19/17 12:58	M5
Acrylonitrile	ug/L	4.0 U	4.0	0.41	09/19/17 12:58	M5
Benzene	ug/L	1.0 U	1.0	0.18	09/19/17 12:58	M5
Bromochloromethane	ug/L	1.0 U	1.0	0.25	09/19/17 12:58	M5
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	09/19/17 12:58	M5
Bromoform	ug/L	1.0 U	1.0	0.14	09/19/17 12:58	M5
Bromomethane	ug/L	1.0 U	1.0	0.64	09/19/17 12:58	M5
Carbon disulfide	ug/L	1.0 U	1.0	0.22	09/19/17 12:58	M5
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	09/19/17 12:58	M5
Chlorobenzene	ug/L	1.0 U	1.0	0.17	09/19/17 12:58	M5
Chloroethane	ug/L	1.0 U	1.0	0.55	09/19/17 12:58	M5
Chloroform	ug/L	1.0 U	1.0	0.24	09/19/17 12:58	M5
Chloromethane	ug/L	1.0 U	1.0	0.19	09/19/17 12:58	M5
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	09/19/17 12:58	M5
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	09/19/17 12:58	M5
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	09/19/17 12:58	M5
Dibromomethane	ug/L	1.0 U	1.0	0.37	09/19/17 12:58	M5
Ethylbenzene	ug/L	1.0 U	1.0	0.20	09/19/17 12:58	M5
Iodomethane	ug/L	50.0 U	50.0	4.6	09/19/17 12:58	CL,M5
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	09/19/17 12:58	M5
Methylene Chloride	ug/L	1.0 U	1.0	0.43	09/19/17 12:58	M5
Naphthalene	ug/L	2.0 U	2.0	0.11	09/19/17 12:58	M5
Styrene	ug/L	1.0 U	1.0	0.16	09/19/17 12:58	M5
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	09/19/17 12:58	M5
Toluene	ug/L	1.0 U	1.0	0.11	09/19/17 12:58	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

METHOD BLANK: 1339522 Matrix: Water
Associated Lab Samples: 30230067002, 30230067003, 30230067004, 30230067010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	09/19/17 12:58	M5
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	09/19/17 12:58	M5
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	09/19/17 12:58	M5
Trichloroethene	ug/L	1.0 U	1.0	0.22	09/19/17 12:58	M5
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	09/19/17 12:58	M5
Vinyl acetate	ug/L	10.0 U	10.0	0.15	09/19/17 12:58	M5
Vinyl chloride	ug/L	1.0 U	1.0	0.32	09/19/17 12:58	M5
Xylene (Total)	ug/L	3.0 U	3.0	0.77	09/19/17 12:58	M5
1,2-Dichloroethane-d4 (S)	%	98	80-120		09/19/17 12:58	M5
4-Bromofluorobenzene (S)	%	102	79-129		09/19/17 12:58	M5
Dibromofluoromethane (S)	%	102	80-120		09/19/17 12:58	M5
Toluene-d8 (S)	%	93	80-120		09/19/17 12:58	M5

LABORATORY CONTROL SAMPLE: 1339523

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.0	100	70-130	M5
1,1,1-Trichloroethane	ug/L	20	19.9	99	70-130	M5
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	92	65-127	M5
1,1,2-Trichloroethane	ug/L	20	19.1	96	70-130	M5
1,1-Dichloroethane	ug/L	20	20.3	101	70-130	M5
1,1-Dichloroethene	ug/L	20	19.7	99	70-130	M5
1,2,3-Trichloropropane	ug/L	20	20.0	100	70-130	M5
1,2-Dibromo-3-chloropropane	ug/L	20	19.7	98	58-128	M5
1,2-Dibromoethane (EDB)	ug/L	20	20.3	101	70-130	M5
1,2-Dichlorobenzene	ug/L	20	20.6	103	70-130	M5
1,2-Dichloroethane	ug/L	20	20.6	103	70-130	M5
1,2-Dichloropropane	ug/L	20	20.3	101	70-130	M5
1,4-Dichlorobenzene	ug/L	20	19.5	98	70-130	M5
2-Butanone (MEK)	ug/L	20	20.0	100	72-170	M5
2-Hexanone	ug/L	20	17.8	89	65-151	M5
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.5	98	66-150	M5
Acetone	ug/L	20	21.1	105	30-179	M5
Acrylonitrile	ug/L	20	20.3	101	48-172	M5
Benzene	ug/L	20	19.8	99	70-130	M5
Bromochloromethane	ug/L	20	22.7	113	70-130	M5
Bromodichloromethane	ug/L	20	18.3	92	70-130	M5
Bromoform	ug/L	20	18.2	91	70-130	M5
Bromomethane	ug/L	20	23.2	116	47-174	M5
Carbon disulfide	ug/L	20	18.7	94	43-133	M5
Carbon tetrachloride	ug/L	20	20.2	101	56-143	M5
Chlorobenzene	ug/L	20	19.9	100	70-130	M5
Chloroethane	ug/L	20	17.6	88	67-139	M5
Chloroform	ug/L	20	20.2	101	70-130	M5

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

LABORATORY CONTROL SAMPLE: 1339523

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	20	18.5	93	57-138	M5
cis-1,2-Dichloroethene	ug/L	20	20.1	101	70-130	M5
cis-1,3-Dichloropropene	ug/L	20	18.9	95	70-130	M5
Dibromochloromethane	ug/L	20	19.7	98	70-130	M5
Dibromomethane	ug/L	20	23.7	118	70-130	M5
Ethylbenzene	ug/L	20	19.1	96	70-130	M5
Iodomethane	ug/L	20	10.1J	51	10-175	CL,M5
Methyl-tert-butyl ether	ug/L	20	20.0	100	70-130	M5
Methylene Chloride	ug/L	20	20.7	104	55-144	M5
Naphthalene	ug/L	20	20.5	103	70-130	M5
Styrene	ug/L	20	19.1	96	70-130	M5
Tetrachloroethene	ug/L	20	20.3	102	70-130	M5
Toluene	ug/L	20	18.5	92	70-130	M5
trans-1,2-Dichloroethene	ug/L	20	20.4	102	70-130	M5
trans-1,3-Dichloropropene	ug/L	20	17.9	89	70-130	M5
trans-1,4-Dichloro-2-butene	ug/L	20	15.2	76	27-116	M5
Trichloroethene	ug/L	20	22.1	110	70-130	M5
Trichlorofluoromethane	ug/L	20	24.2	121	60-148	M5
Vinyl acetate	ug/L	20	15.5	77	30-181	M5
Vinyl chloride	ug/L	20	19.5	98	70-130	M5
Xylene (Total)	ug/L	60	58.8	98	70-130	M5
1,2-Dichloroethane-d4 (S)	%			99	80-120	M5
4-Bromofluorobenzene (S)	%			103	79-129	M5
Dibromofluoromethane (S)	%			108	80-120	M5
Toluene-d8 (S)	%			95	80-120	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

QC Batch: 272291 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30230067005, 30230067006, 30230067007, 30230067008, 30230067009

METHOD BLANK: 1339525 | Matrix: Water
Associated Lab Samples: 30230067005, 30230067006, 30230067007, 30230067008, 30230067009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	09/19/17 13:10	M5
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	09/19/17 13:10	M5
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	09/19/17 13:10	M5
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	09/19/17 13:10	M5
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	09/19/17 13:10	M5
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	09/19/17 13:10	M5
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	09/19/17 13:10	M5
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	09/19/17 13:10	M5
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	09/19/17 13:10	M5
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	09/19/17 13:10	M5
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	09/19/17 13:10	M5
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	09/19/17 13:10	M5
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	09/19/17 13:10	M5
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	09/19/17 13:10	M5
2-Hexanone	ug/L	10.0 U	10.0	0.26	09/19/17 13:10	M5
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	09/19/17 13:10	M5
Acetone	ug/L	10.0 U	10.0	2.9	09/19/17 13:10	M5
Acrylonitrile	ug/L	4.0 U	4.0	0.41	09/19/17 13:10	M5
Benzene	ug/L	1.0 U	1.0	0.18	09/19/17 13:10	M5
Bromochloromethane	ug/L	1.0 U	1.0	0.25	09/19/17 13:10	M5
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	09/19/17 13:10	M5
Bromoform	ug/L	1.0 U	1.0	0.14	09/19/17 13:10	M5
Bromomethane	ug/L	1.0 U	1.0	0.64	09/19/17 13:10	M5
Carbon disulfide	ug/L	1.0 U	1.0	0.22	09/19/17 13:10	M5
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	09/19/17 13:10	M5
Chlorobenzene	ug/L	1.0 U	1.0	0.17	09/19/17 13:10	M5
Chloroethane	ug/L	1.0 U	1.0	0.55	09/19/17 13:10	M5
Chloroform	ug/L	1.0 U	1.0	0.24	09/19/17 13:10	M5
Chloromethane	ug/L	1.0 U	1.0	0.19	09/19/17 13:10	M5
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	09/19/17 13:10	M5
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	09/19/17 13:10	M5
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	09/19/17 13:10	M5
Dibromomethane	ug/L	1.0 U	1.0	0.37	09/19/17 13:10	M5
Ethylbenzene	ug/L	1.0 U	1.0	0.20	09/19/17 13:10	M5
Iodomethane	ug/L	50.0 U	50.0	4.6	09/19/17 13:10	CL,M5
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	09/19/17 13:10	M5
Methylene Chloride	ug/L	1.0 U	1.0	0.43	09/19/17 13:10	M5
Naphthalene	ug/L	2.0 U	2.0	0.11	09/19/17 13:10	M5
Styrene	ug/L	1.0 U	1.0	0.16	09/19/17 13:10	M5
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	09/19/17 13:10	M5
Toluene	ug/L	1.0 U	1.0	0.11	09/19/17 13:10	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

METHOD BLANK: 1339525 Matrix: Water
Associated Lab Samples: 30230067005, 30230067006, 30230067007, 30230067008, 30230067009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	09/19/17 13:10	M5
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	09/19/17 13:10	M5
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	09/19/17 13:10	M5
Trichloroethene	ug/L	1.0 U	1.0	0.22	09/19/17 13:10	M5
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	09/19/17 13:10	M5
Vinyl acetate	ug/L	10.0 U	10.0	0.15	09/19/17 13:10	M5
Vinyl chloride	ug/L	1.0 U	1.0	0.32	09/19/17 13:10	M5
Xylene (Total)	ug/L	3.0 U	3.0	0.77	09/19/17 13:10	M5
1,2-Dichloroethane-d4 (S)	%	101	80-120		09/19/17 13:10	M5
4-Bromofluorobenzene (S)	%	103	79-129		09/19/17 13:10	M5
Dibromofluoromethane (S)	%	101	80-120		09/19/17 13:10	M5
Toluene-d8 (S)	%	94	80-120		09/19/17 13:10	M5

LABORATORY CONTROL SAMPLE: 1339526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.0	105	70-130	M5
1,1,1-Trichloroethane	ug/L	20	20.2	101	70-130	M5
1,1,2,2-Tetrachloroethane	ug/L	20	18.4	92	65-127	M5
1,1,2-Trichloroethane	ug/L	20	20.1	101	70-130	M5
1,1-Dichloroethane	ug/L	20	20.2	101	70-130	M5
1,1-Dichloroethene	ug/L	20	20.4	102	70-130	M5
1,2,3-Trichloropropane	ug/L	20	20.5	103	70-130	M5
1,2-Dibromo-3-chloropropane	ug/L	20	19.1	96	58-128	M5
1,2-Dibromoethane (EDB)	ug/L	20	21.1	106	70-130	M5
1,2-Dichlorobenzene	ug/L	20	20.3	102	70-130	M5
1,2-Dichloroethane	ug/L	20	19.7	99	70-130	M5
1,2-Dichloropropane	ug/L	20	20.2	101	70-130	M5
1,4-Dichlorobenzene	ug/L	20	20.5	103	70-130	M5
2-Butanone (MEK)	ug/L	20	20.8	104	72-170	M5
2-Hexanone	ug/L	20	18.9	94	65-151	M5
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.9	99	66-150	M5
Acetone	ug/L	20	21.5	108	30-179	M5
Acrylonitrile	ug/L	20	19.7	98	48-172	M5
Benzene	ug/L	20	19.9	100	70-130	M5
Bromochloromethane	ug/L	20	22.5	112	70-130	M5
Bromodichloromethane	ug/L	20	18.9	94	70-130	M5
Bromoform	ug/L	20	19.2	96	70-130	M5
Bromomethane	ug/L	20	21.1	106	47-174	M5
Carbon disulfide	ug/L	20	18.0	90	43-133	M5
Carbon tetrachloride	ug/L	20	20.4	102	56-143	M5
Chlorobenzene	ug/L	20	20.9	105	70-130	M5
Chloroethane	ug/L	20	21.3	107	67-139	M5
Chloroform	ug/L	20	19.8	99	70-130	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

LABORATORY CONTROL SAMPLE: 1339526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	20	19.5	97	57-138	M5
cis-1,2-Dichloroethene	ug/L	20	20.1	100	70-130	M5
cis-1,3-Dichloropropene	ug/L	20	19.1	96	70-130	M5
Dibromochloromethane	ug/L	20	19.8	99	70-130	M5
Dibromomethane	ug/L	20	22.0	110	70-130	M5
Ethylbenzene	ug/L	20	20.8	104	70-130	M5
Iodomethane	ug/L	20	12.2J	61	10-175	CL,M5
Methyl-tert-butyl ether	ug/L	20	20.0	100	70-130	M5
Methylene Chloride	ug/L	20	19.1	95	55-144	M5
Naphthalene	ug/L	20	19.9	100	70-130	M5
Styrene	ug/L	20	20.0	100	70-130	M5
Tetrachloroethene	ug/L	20	21.9	109	70-130	M5
Toluene	ug/L	20	19.8	99	70-130	M5
trans-1,2-Dichloroethene	ug/L	20	19.9	100	70-130	M5
trans-1,3-Dichloropropene	ug/L	20	18.7	93	70-130	M5
trans-1,4-Dichloro-2-butene	ug/L	20	15.3	76	27-116	M5
Trichloroethene	ug/L	20	21.5	108	70-130	M5
Trichlorofluoromethane	ug/L	20	22.3	112	60-148	M5
Vinyl acetate	ug/L	20	15.2	76	30-181	M5
Vinyl chloride	ug/L	20	20.5	102	70-130	M5
Xylene (Total)	ug/L	60	61.8	103	70-130	M5
1,2-Dichloroethane-d4 (S)	%			99	80-120	M5
4-Bromofluorobenzene (S)	%			102	79-129	M5
Dibromofluoromethane (S)	%			106	80-120	M5
Toluene-d8 (S)	%			99	80-120	M5

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(724)850-5600

QUALIFIERS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: 271827

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 272290

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 272291

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven 3rd Quarter
Pace Project No.: 30230067

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30230067001	**Trip Blank**	EPA 8260B	271827		
30230067002	**CO60-PZP001**	EPA 8260B	272290		
30230067003	**CO26-PZM007**	EPA 8260B	272290		
30230067004	**CO58-PZM001**	EPA 8260B	272290		
30230067005	**CO57-PZP002**	EPA 8260B	272291		
30230067006	**CO55-PZM000**	EPA 8260B	272291		
30230067007	**CO56-PZP001**	EPA 8260B	272291		
30230067008	**CO59-PZP002**	EPA 8260B	272291		
30230067009	**CO23-PZM008**	EPA 8260B	272291		
30230067010	**CO24-PZM007**	EPA 8260B	272290		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

MP 29

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	EnviroAnalytics Group	Report To:	James Calenda	Attention:	Laura Sargent
Address:	1430 Sparrows Point Blvd	Copy To:		Company Name:	EnviroAnalytics Group
	Sparrows Point, MD 21219			Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Email To:	jcalenda@enviroanalyticsgroup.com	PO Number:		Pace Quote Reference:	
Phone: 314-620-3056	Fax:	Project Name:	Coke Oven 3rd Quarter	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	170384M-1-2	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MD

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	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	DI Water	Analysis Test (Y/N)	VOC/8260B	SVOC 8270D	DRO/8015B	GRO/8015B	METALS/6010C	Mercury/7471A or 7470A	Hexavalent Chromium/7196A	Total Cyanide/9012A	PCB/8082 (soil)		Oil and Grease/1664A (ac	Oil and Grease/9071B (soil)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank	UST	G			9/14	/17		2																							001
2	C060-PZP001						0838		3																							002
3	C026-PZM007						0930		3																							003
4	C058-PZM001						1003		3																							004
5	C057-PZP002						1044		3																							005
6	C055-PZM000						1123		3																							006
7	C056-PZP001						1230		3																							007
8	C059-PZP002						1309		3																							008
9	C023-PZM008						1406		3																							009
10	C024-PZM007						1452		3																							010
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Data Package Required? (Y/N):	Leandra M Glamac	9/14/17	1525	David L Hillegass Pace	9/14/17	1610				
Data Validation Required? (Y/N):	David L Hillegass Pace	9/14/17	1944		9/14/17	1945				
If data package is required, attach data package checklist.		9/14/17	2330	Ashleigh Pace	9-14-17	2330	4.0	Y	N	Y

WO#: 30230067

30230067

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Leandra M Glamac

SIGNATURE of SAMPLER: Leandra Glamac

DATE Signed (MM/DD/YY): 09/14/17

*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.

F-ALL-Q-020rev.06, 2-Feb-2007

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Enviro Ana. Project # 30230067

Label AM
LIMS Login BLM

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 6 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 4.0 °C Correction Factor: +0.0 °C Final Temp: 4.0 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AM 9-15-17

Comments:	Yes	No	N/A		
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.	
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	X			9.	
Correct Containers Used: -Pace Containers Used:	X			10.	
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.	
Organic Samples checked for dechlorination:			X	14.	
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation.			X	16.	
All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: (VOA,) coliform, TOC, O&G, Phenolics			X	Initial when completed AM / Date/time of preservation / Lot # of added preservative	
Headspace in VOA Vials (>6mm):		X		17.	
Trip Blank Present:	X			18.	
Trip Blank Custody Seals Present	X				
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed:	Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

September 21, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
1600 Sparrows Point Blvd
Suite B2
Sparrows Point, MD 21219

RE: Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project:	Coke Oven 3rd Quarter
Pace Project No.:	30229895

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30229895001	**Trip Blank**	Water	09/13/17 00:01	09/13/17 23:15
30229895002	**C042-PZM004**	Water	09/13/17 11:14	09/13/17 23:15
30229895003	**C036-PZM008**	Water	09/13/17 12:30	09/13/17 23:15
30229895004	**C036-PZM043**	Water	09/13/17 13:05	09/13/17 23:15
30229895005	**C041-PZM001**	Water	09/13/17 14:20	09/13/17 23:15
30229895006	**C041-PZM036**	Water	09/13/17 14:49	09/13/17 23:15
30229895007	**C093-PZMXXX**	Water	09/13/17 15:26	09/13/17 23:15

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SAMPLE ANALYTE COUNT

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30229895001	**Trip Blank**	EPA 8260B	MAK	53	PASI-PA
30229895002	**C042-PZM004**	EPA 8260B	MAK	53	PASI-PA
30229895003	**C036-PZM008**	EPA 8260B	MAK	53	PASI-PA
30229895004	**C036-PZM043**	EPA 8260B	MAK	53	PASI-PA
30229895005	**C041-PZM001**	EPA 8260B	MAK	53	PASI-PA
30229895006	**C041-PZM036**	EPA 8260B	MAK	53	PASI-PA
30229895007	**C093-PZMXXX**	EPA 8260B	MAK	53	PASI-PA

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: Trip Blank **Lab ID: 30229895001** Collected: 09/13/17 00:01 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 12:17	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 12:17	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:17	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 12:17	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 12:17	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 12:17	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 12:17	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 12:17	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 12:17	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:17	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 12:17	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:17	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 12:17	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 12:17	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 12:17	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 12:17	108-10-1	M5
Acetone	ND	ug/L	5.0	2.9	1		09/15/17 12:17	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 12:17	107-13-1	M5
Benzene	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 12:17	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 12:17	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:17	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:17	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 12:17	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 12:17	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:17	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:17	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 12:17	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 12:17	67-66-3	M5
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 12:17	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 12:17	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 12:17	74-95-3	M5
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		09/15/17 12:17	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 12:17	74-88-4	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:17	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 12:17	75-09-2	M5
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		09/15/17 12:17	91-20-3	M5
Styrene	**1.0 U**	ug/L	1.0	0.16	1		09/15/17 12:17	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 12:17	127-18-4	M5
Toluene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:17	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 12:17	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 12:17	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 12:17	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 12:17	75-01-4	M5
Xylene (Total)	ND	ug/L	1.0	0.77	1		09/15/17 12:17	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 12:17	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 12:17	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: Trip Blank **Lab ID: 30229895001** Collected: 09/13/17 00:01 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 12:17	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 12:17	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 12:17	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	102	%	79-129		1		09/15/17 12:17	460-00-4	M5
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		09/15/17 12:17	17060-07-0	M5
Toluene-d8 (S)	96	%	80-120		1		09/15/17 12:17	2037-26-5	M5
Dibromofluoromethane (S)	99	%	80-120		1		09/15/17 12:17	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C042-PZM004 **Lab ID: 30229895002** Collected: 09/13/17 11:14 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		09/15/17 16:30	630-20-6	M5
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 16:30	71-55-6	M5
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 16:30	79-34-5	M5
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		09/15/17 16:30	79-00-5	M5
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		09/15/17 16:30	75-34-3	M5
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		09/15/17 16:30	75-35-4	M5
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		09/15/17 16:30	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		09/15/17 16:30	96-12-8	M5
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 16:30	106-93-4	M5
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 16:30	95-50-1	M5
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		09/15/17 16:30	107-06-2	M5
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 16:30	78-87-5	M5
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		09/15/17 16:30	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		09/15/17 16:30	78-93-3	M5
2-Hexanone	ND	ug/L	5.0	0.26	1		09/15/17 16:30	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		09/15/17 16:30	108-10-1	M5
Acetone	**48.6**	ug/L	5.0	2.9	1		09/15/17 16:30	67-64-1	M5
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		09/15/17 16:30	107-13-1	M5
Benzene	**1220**	ug/L	50.0	8.9	50		09/15/17 16:56	71-43-2	M5
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		09/15/17 16:30	74-97-5	M5
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 16:30	75-27-4	M5
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 16:30	75-25-2	M5
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		09/15/17 16:30	74-83-9	M5
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 16:30	75-15-0	M5
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 16:30	56-23-5	M5
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 16:30	108-90-7	M5
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		09/15/17 16:30	75-00-3	M5
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		09/15/17 16:30	67-66-3	M5
Chloromethane	**1.4**	ug/L	1.0	0.19	1		09/15/17 16:30	74-87-3	M5
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		09/15/17 16:30	124-48-1	M5
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		09/15/17 16:30	74-95-3	M5
Ethylbenzene	**52.4**	ug/L	1.0	0.20	1		09/15/17 16:30	100-41-4	M5
Iodomethane	ND	ug/L	1.0	4.6	1		09/15/17 16:30	74-88-4	M5
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 16:30	1634-04-4	M5
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		09/15/17 16:30	75-09-2	M5
Naphthalene	**155**	ug/L	2.0	0.11	1		09/15/17 16:30	91-20-3	M5
Styrene	**49.6**	ug/L	1.0	0.16	1		09/15/17 16:30	100-42-5	M5
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		09/15/17 16:30	127-18-4	M5
Toluene	**1930**	ug/L	50.0	5.5	50		09/15/17 16:56	108-88-3	M5
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		09/15/17 16:30	79-01-6	M5
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		09/15/17 16:30	75-69-4	M5
Vinyl acetate	ND	ug/L	2.0	0.15	1		09/15/17 16:30	108-05-4	M5
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		09/15/17 16:30	75-01-4	M5
Xylene (Total)	**464**	ug/L	1.0	0.77	1		09/15/17 16:30	1330-20-7	M5
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		09/15/17 16:30	156-59-2	M5
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		09/15/17 16:30	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C042-PZM004 **Lab ID: 30229895002** Collected: 09/13/17 11:14 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		09/15/17 16:30	156-60-5	M5
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		09/15/17 16:30	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		09/15/17 16:30	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		1		09/15/17 16:30	460-00-4	M5
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		09/15/17 16:30	17060-07-0	M5
Toluene-d8 (S)	99	%	80-120		1		09/15/17 16:30	2037-26-5	M5
Dibromofluoromethane (S)	99	%	80-120		1		09/15/17 16:30	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C036-PZM008 **Lab ID: 30229895003** Collected: 09/13/17 12:30 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 17:21	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 17:21	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 17:21	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 17:21	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 17:21	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 17:21	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 17:21	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 17:21	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 17:21	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 17:21	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 17:21	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 17:21	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 17:21	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 17:21	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 17:21	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 17:21	108-10-1	M5
Acetone	**57.9**	ug/L	25.0	14.6	5		09/15/17 17:21	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 17:21	107-13-1	M5
Benzene	**16400**	ug/L	500	89.0	500		09/15/17 17:46	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 17:21	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 17:21	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 17:21	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 17:21	74-83-9	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 17:21	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 17:21	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/15/17 17:21	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 17:21	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 17:21	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 17:21	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 17:21	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 17:21	74-95-3	M5
Ethylbenzene	**59.8**	ug/L	5.0	0.98	5		09/15/17 17:21	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 17:21	74-88-4	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 17:21	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 17:21	75-09-2	M5
Naphthalene	**435**	ug/L	10.0	0.56	5		09/15/17 17:21	91-20-3	M5
Styrene	**16.9**	ug/L	5.0	0.81	5		09/15/17 17:21	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 17:21	127-18-4	M5
Toluene	**3490**	ug/L	500	55.0	500		09/15/17 17:46	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 17:21	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 17:21	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 17:21	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 17:21	75-01-4	M5
Xylene (Total)	**1040**	ug/L	5.0	3.8	5		09/15/17 17:21	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 17:21	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 17:21	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C036-PZM008 **Lab ID: 30229895003** Collected: 09/13/17 12:30 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 17:21	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 17:21	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 17:21	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		5		09/15/17 17:21	460-00-4	M5
1,2-Dichloroethane-d4 (S)	98	%	80-120		5		09/15/17 17:21	17060-07-0	M5
Toluene-d8 (S)	97	%	80-120		5		09/15/17 17:21	2037-26-5	M5
Dibromofluoromethane (S)	100	%	80-120		5		09/15/17 17:21	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C036-PZM043 **Lab ID: 30229895004** Collected: 09/13/17 13:05 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 18:12	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 18:12	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 18:12	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 18:12	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 18:12	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 18:12	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 18:12	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 18:12	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 18:12	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 18:12	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 18:12	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 18:12	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 18:12	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 18:12	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 18:12	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 18:12	108-10-1	M5
Acetone	**93.7**	ug/L	25.0	14.6	5		09/15/17 18:12	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 18:12	107-13-1	M5
Benzene	**31500**	ug/L	500	89.0	500		09/19/17 22:18	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 18:12	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 18:12	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 18:12	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 18:12	74-83-9	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 18:12	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 18:12	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/15/17 18:12	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 18:12	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 18:12	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 18:12	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 18:12	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 18:12	74-95-3	M5
Ethylbenzene	**43.4**	ug/L	5.0	0.98	5		09/15/17 18:12	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 18:12	74-88-4	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 18:12	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 18:12	75-09-2	M5
Naphthalene	**742**	ug/L	10.0	0.56	5		09/15/17 18:12	91-20-3	M5
Styrene	**9.1**	ug/L	5.0	0.81	5		09/15/17 18:12	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 18:12	127-18-4	M5
Toluene	**3430**	ug/L	50.0	5.5	50		09/15/17 18:37	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 18:12	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 18:12	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 18:12	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 18:12	75-01-4	M5
Xylene (Total)	**704**	ug/L	5.0	3.8	5		09/15/17 18:12	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 18:12	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 18:12	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C036-PZM043 **Lab ID: 30229895004** Collected: 09/13/17 13:05 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 18:12	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 18:12	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 18:12	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	99	%	79-129		5		09/15/17 18:12	460-00-4	M5
1,2-Dichloroethane-d4 (S)	99	%	80-120		5		09/15/17 18:12	17060-07-0	M5
Toluene-d8 (S)	99	%	80-120		5		09/15/17 18:12	2037-26-5	M5
Dibromofluoromethane (S)	99	%	80-120		5		09/15/17 18:12	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C041-PZM001 **Lab ID: 30229895005** Collected: 09/13/17 14:20 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 20:56	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 20:56	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 20:56	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 20:56	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 20:56	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:56	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 20:56	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 20:56	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 20:56	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 20:56	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 20:56	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 20:56	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:56	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 20:56	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 20:56	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 20:56	108-10-1	M5
Acetone	**91.8**	ug/L	25.0	14.6	5		09/15/17 20:56	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 20:56	107-13-1	M5
Benzene	**1960**	ug/L	5.0	0.89	5		09/15/17 20:56	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 20:56	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 20:56	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 20:56	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 20:56	74-83-9	CH,M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:56	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 20:56	56-23-5	M5
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		09/15/17 20:56	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 20:56	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 20:56	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 20:56	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 20:56	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 20:56	74-95-3	M5
Ethylbenzene	**59.5**	ug/L	5.0	0.98	5		09/15/17 20:56	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 20:56	74-88-4	L1,M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 20:56	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 20:56	75-09-2	M5
Naphthalene	**45.7**	ug/L	10.0	0.56	5		09/15/17 20:56	91-20-3	M5
Styrene	**1.2J**	ug/L	5.0	0.81	5		09/15/17 20:56	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 20:56	127-18-4	M5
Toluene	**1490**	ug/L	5.0	0.55	5		09/15/17 20:56	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:56	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 20:56	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 20:56	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 20:56	75-01-4	M5
Xylene (Total)	**569**	ug/L	5.0	3.8	5		09/15/17 20:56	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 20:56	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 20:56	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C041-PZM001 **Lab ID: 30229895005** Collected: 09/13/17 14:20 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 20:56	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 20:56	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 20:56	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-129		5		09/15/17 20:56	460-00-4	M5
1,2-Dichloroethane-d4 (S)	99	%	80-120		5		09/15/17 20:56	17060-07-0	M5
Toluene-d8 (S)	96	%	80-120		5		09/15/17 20:56	2037-26-5	M5
Dibromofluoromethane (S)	101	%	80-120		5		09/15/17 20:56	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C041-PZM036 **Lab ID: 30229895006** Collected: 09/13/17 14:49 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 19:02	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 19:02	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 19:02	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 19:02	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 19:02	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:02	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 19:02	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 19:02	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 19:02	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 19:02	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 19:02	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 19:02	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:02	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 19:02	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 19:02	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 19:02	108-10-1	M5
Acetone	**66.6**	ug/L	25.0	14.6	5		09/15/17 19:02	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 19:02	107-13-1	M5
Benzene	**113000**	ug/L	500	89.0	500		09/15/17 19:27	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 19:02	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 19:02	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 19:02	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 19:02	74-83-9	M5
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:02	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 19:02	56-23-5	M5
Chlorobenzene	**1.7J**	ug/L	5.0	0.85	5		09/15/17 19:02	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 19:02	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 19:02	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 19:02	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 19:02	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 19:02	74-95-3	M5
Ethylbenzene	**592**	ug/L	5.0	0.98	5		09/15/17 19:02	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 19:02	74-88-4	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 19:02	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 19:02	75-09-2	M5
Naphthalene	**234**	ug/L	10.0	0.56	5		09/15/17 19:02	91-20-3	M5
Styrene	**264**	ug/L	5.0	0.81	5		09/15/17 19:02	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 19:02	127-18-4	M5
Toluene	**31700**	ug/L	500	55.0	500		09/15/17 19:27	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 19:02	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 19:02	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 19:02	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 19:02	75-01-4	M5
Xylene (Total)	**10200**	ug/L	500	384	500		09/15/17 19:27	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 19:02	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 19:02	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C041-PZM036 **Lab ID: 30229895006** Collected: 09/13/17 14:49 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 19:02	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 19:02	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 19:02	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	98	%	79-129		5		09/15/17 19:02	460-00-4	M5
1,2-Dichloroethane-d4 (S)	96	%	80-120		5		09/15/17 19:02	17060-07-0	M5
Toluene-d8 (S)	101	%	80-120		5		09/15/17 19:02	2037-26-5	M5
Dibromofluoromethane (S)	102	%	80-120		5		09/15/17 19:02	1868-53-7	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C093-PZMXXX **Lab ID: 30229895007** Collected: 09/13/17 15:26 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 20:43	630-20-6	M5
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		09/15/17 20:43	71-55-6	M5
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		09/15/17 20:43	79-34-5	M5
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		09/15/17 20:43	79-00-5	M5
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		09/15/17 20:43	75-34-3	M5
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:43	75-35-4	M5
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 20:43	96-18-4	M5
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.6	5		09/15/17 20:43	96-12-8	M5
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 20:43	106-93-4	M5
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		09/15/17 20:43	95-50-1	M5
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		09/15/17 20:43	107-06-2	M5
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		09/15/17 20:43	78-87-5	M5
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:43	106-46-7	M5
2-Butanone (MEK)	ND	ug/L	25.0	1.6	5		09/15/17 20:43	78-93-3	M5
2-Hexanone	ND	ug/L	25.0	1.3	5		09/15/17 20:43	591-78-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	0.80	5		09/15/17 20:43	108-10-1	M5
Acetone	**62.9**	ug/L	25.0	14.6	5		09/15/17 20:43	67-64-1	M5
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		09/15/17 20:43	107-13-1	M5
Benzene	**230000**	ug/L	1000	178	1000		09/15/17 21:08	71-43-2	M5
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		09/15/17 20:43	74-97-5	M5
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 20:43	75-27-4	M5
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		09/15/17 20:43	75-25-2	M5
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		09/15/17 20:43	74-83-9	M5
Carbon disulfide	**19.7**	ug/L	5.0	1.1	5		09/15/17 20:43	75-15-0	M5
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		09/15/17 20:43	56-23-5	M5
Chlorobenzene	**12.0**	ug/L	5.0	0.85	5		09/15/17 20:43	108-90-7	M5
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		09/15/17 20:43	75-00-3	M5
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		09/15/17 20:43	67-66-3	M5
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		09/15/17 20:43	74-87-3	M5
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		09/15/17 20:43	124-48-1	M5
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		09/15/17 20:43	74-95-3	M5
Ethylbenzene	**1130**	ug/L	5.0	0.98	5		09/15/17 20:43	100-41-4	M5
Iodomethane	ND	ug/L	5.0	23.2	5		09/15/17 20:43	74-88-4	M5
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 20:43	1634-04-4	M5
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		09/15/17 20:43	75-09-2	M5
Naphthalene	**3750**	ug/L	2000	111	1000		09/15/17 21:08	91-20-3	M5
Styrene	**1200**	ug/L	5.0	0.81	5		09/15/17 20:43	100-42-5	M5
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		09/15/17 20:43	127-18-4	M5
Toluene	**61500**	ug/L	1000	110	1000		09/15/17 21:08	108-88-3	M5
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		09/15/17 20:43	79-01-6	M5
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		09/15/17 20:43	75-69-4	M5
Vinyl acetate	ND	ug/L	10.0	0.74	5		09/15/17 20:43	108-05-4	M5
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		09/15/17 20:43	75-01-4	M5
Xylene (Total)	**15300**	ug/L	1000	769	1000		09/15/17 21:08	1330-20-7	M5
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		09/15/17 20:43	156-59-2	M5
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		09/15/17 20:43	10061-01-5	M5

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ANALYTICAL RESULTS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Sample: C093-PZMXXX **Lab ID: 30229895007** Collected: 09/13/17 15:26 Received: 09/13/17 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		09/15/17 20:43	156-60-5	M5
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		09/15/17 20:43	10061-02-6	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	2.0	5		09/15/17 20:43	110-57-6	M5
Surrogates									
4-Bromofluorobenzene (S)	93	%	79-129		5		09/15/17 20:43	460-00-4	M5
1,2-Dichloroethane-d4 (S)	99	%	80-120		5		09/15/17 20:43	17060-07-0	M5
Toluene-d8 (S)	103	%	80-120		5		09/15/17 20:43	2037-26-5	M5
Dibromofluoromethane (S)	104	%	80-120		5		09/15/17 20:43	1868-53-7	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

QC Batch: 271824 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30229895005

METHOD BLANK: 1337451 | Matrix: Water
Associated Lab Samples: 30229895005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	09/15/17 11:39	M5
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:39	M5
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	09/15/17 11:39	M5
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	09/15/17 11:39	M5
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	09/15/17 11:39	M5
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	09/15/17 11:39	M5
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	09/15/17 11:39	M5
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	09/15/17 11:39	M5
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	09/15/17 11:39	M5
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	09/15/17 11:39	M5
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	09/15/17 11:39	M5
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	09/15/17 11:39	M5
2-Hexanone	ug/L	10.0 U	10.0	0.26	09/15/17 11:39	M5
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	09/15/17 11:39	M5
Acetone	ug/L	10.0 U	10.0	2.9	09/15/17 11:39	M5
Acrylonitrile	ug/L	4.0 U	4.0	0.41	09/15/17 11:39	M5
Benzene	ug/L	1.0 U	1.0	0.18	09/15/17 11:39	M5
Bromochloromethane	ug/L	1.0 U	1.0	0.25	09/15/17 11:39	M5
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
Bromoform	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
Bromomethane	ug/L	1.0 U	1.0	0.64	09/15/17 11:39	CH,M5
Carbon disulfide	ug/L	1.0 U	1.0	0.22	09/15/17 11:39	M5
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
Chlorobenzene	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
Chloroethane	ug/L	1.0 U	1.0	0.55	09/15/17 11:39	M5
Chloroform	ug/L	1.0 U	1.0	0.24	09/15/17 11:39	M5
Chloromethane	ug/L	1.0 U	1.0	0.19	09/15/17 11:39	M5
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	09/15/17 11:39	M5
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:39	M5
Dibromomethane	ug/L	1.0 U	1.0	0.37	09/15/17 11:39	M5
Ethylbenzene	ug/L	1.0 U	1.0	0.20	09/15/17 11:39	M5
Iodomethane	ug/L	50.0 U	50.0	4.6	09/15/17 11:39	M5
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	09/15/17 11:39	M5
Methylene Chloride	ug/L	1.0 U	1.0	0.43	09/15/17 11:39	M5
Naphthalene	ug/L	2.0 U	2.0	0.11	09/15/17 11:39	M5
Styrene	ug/L	1.0 U	1.0	0.16	09/15/17 11:39	M5
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	09/15/17 11:39	M5
Toluene	ug/L	1.0 U	1.0	0.11	09/15/17 11:39	M5

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

METHOD BLANK: 1337451 Matrix: Water
Associated Lab Samples: 30229895005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	09/15/17 11:39	M5
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	09/15/17 11:39	M5
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	09/15/17 11:39	M5
Trichloroethene	ug/L	1.0 U	1.0	0.22	09/15/17 11:39	M5
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	09/15/17 11:39	M5
Vinyl acetate	ug/L	10.0 U	10.0	0.15	09/15/17 11:39	M5
Vinyl chloride	ug/L	1.0 U	1.0	0.32	09/15/17 11:39	M5
Xylene (Total)	ug/L	3.0 U	3.0	0.77	09/15/17 11:39	M5
1,2-Dichloroethane-d4 (S)	%	98	80-120		09/15/17 11:39	M5
4-Bromofluorobenzene (S)	%	103	79-129		09/15/17 11:39	M5
Dibromofluoromethane (S)	%	98	80-120		09/15/17 11:39	M5
Toluene-d8 (S)	%	95	80-120		09/15/17 11:39	M5

LABORATORY CONTROL SAMPLE: 1337452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.8	99	70-130	M5
1,1,1-Trichloroethane	ug/L	20	19.3	96	70-130	M5
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	92	65-127	M5
1,1,2-Trichloroethane	ug/L	20	19.6	98	70-130	M5
1,1-Dichloroethane	ug/L	20	19.2	96	70-130	M5
1,1-Dichloroethene	ug/L	20	19.5	98	70-130	M5
1,2,3-Trichloropropane	ug/L	20	19.7	98	70-130	M5
1,2-Dibromo-3-chloropropane	ug/L	20	18.7	93	58-128	M5
1,2-Dibromoethane (EDB)	ug/L	20	19.7	98	70-130	M5
1,2-Dichlorobenzene	ug/L	20	19.6	98	70-130	M5
1,2-Dichloroethane	ug/L	20	19.8	99	70-130	M5
1,2-Dichloropropane	ug/L	20	19.5	98	70-130	M5
1,4-Dichlorobenzene	ug/L	20	19.6	98	70-130	M5
2-Butanone (MEK)	ug/L	20	17.5	87	72-170	M5
2-Hexanone	ug/L	20	17.0	85	65-151	M5
4-Methyl-2-pentanone (MIBK)	ug/L	20	18.6	93	66-150	M5
Acetone	ug/L	20	19.5	97	30-179	M5
Acrylonitrile	ug/L	20	18.3	91	48-172	M5
Benzene	ug/L	20	19.4	97	70-130	M5
Bromochloromethane	ug/L	20	22.8	114	70-130	M5
Bromodichloromethane	ug/L	20	17.9	89	70-130	M5
Bromoform	ug/L	20	18.5	92	70-130	M5
Bromomethane	ug/L	20	30.4	152	47-174	CH,M5
Carbon disulfide	ug/L	20	18.5	92	43-133	M5
Carbon tetrachloride	ug/L	20	18.7	94	56-143	M5
Chlorobenzene	ug/L	20	20.0	100	70-130	M5
Chloroethane	ug/L	20	18.1	91	67-139	M5
Chloroform	ug/L	20	19.0	95	70-130	M5

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

LABORATORY CONTROL SAMPLE: 1337452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	20	18.5	92	57-138	M5
cis-1,2-Dichloroethene	ug/L	20	19.8	99	70-130	M5
cis-1,3-Dichloropropene	ug/L	20	18.4	92	70-130	M5
Dibromochloromethane	ug/L	20	19.3	96	70-130	M5
Dibromomethane	ug/L	20	22.1	111	70-130	M5
Ethylbenzene	ug/L	20	20.2	101	70-130	M5
Iodomethane	ug/L	20	35.5J	177	10-175	L1,M5
Methyl-tert-butyl ether	ug/L	20	19.1	95	70-130	M5
Methylene Chloride	ug/L	20	21.4	107	55-144	M5
Naphthalene	ug/L	20	20.2	101	70-130	M5
Styrene	ug/L	20	19.4	97	70-130	M5
Tetrachloroethene	ug/L	20	21.0	105	70-130	M5
Toluene	ug/L	20	18.8	94	70-130	M5
trans-1,2-Dichloroethene	ug/L	20	19.8	99	70-130	M5
trans-1,3-Dichloropropene	ug/L	20	18.2	91	70-130	M5
trans-1,4-Dichloro-2-butene	ug/L	20	16.7	84	27-116	M5
Trichloroethene	ug/L	20	20.9	104	70-130	M5
Trichlorofluoromethane	ug/L	20	23.5	118	60-148	M5
Vinyl acetate	ug/L	20	15.2	76	30-181	M5
Vinyl chloride	ug/L	20	19.4	97	70-130	M5
Xylene (Total)	ug/L	60	58.5	98	70-130	M5
1,2-Dichloroethane-d4 (S)	%			96	80-120	M5
4-Bromofluorobenzene (S)	%			99	79-129	M5
Dibromofluoromethane (S)	%			104	80-120	M5
Toluene-d8 (S)	%			96	80-120	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

QC Batch: 271827 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30229895001, 30229895002, 30229895003, 30229895004, 30229895006, 30229895007

METHOD BLANK: 1337463 | Matrix: Water
Associated Lab Samples: 30229895001, 30229895002, 30229895003, 30229895004, 30229895006, 30229895007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	09/15/17 11:52	M5
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:52	M5
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	09/15/17 11:52	M5
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	09/15/17 11:52	M5
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	09/15/17 11:52	M5
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	09/15/17 11:52	M5
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	09/15/17 11:52	M5
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	09/15/17 11:52	M5
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	09/15/17 11:52	M5
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	09/15/17 11:52	M5
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	09/15/17 11:52	M5
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	09/15/17 11:52	M5
2-Hexanone	ug/L	10.0 U	10.0	0.26	09/15/17 11:52	M5
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	09/15/17 11:52	M5
Acetone	ug/L	10.0 U	10.0	2.9	09/15/17 11:52	M5
Acrylonitrile	ug/L	4.0 U	4.0	0.41	09/15/17 11:52	M5
Benzene	ug/L	1.0 U	1.0	0.18	09/15/17 11:52	M5
Bromochloromethane	ug/L	1.0 U	1.0	0.25	09/15/17 11:52	M5
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
Bromoform	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
Bromomethane	ug/L	1.0 U	1.0	0.64	09/15/17 11:52	M5
Carbon disulfide	ug/L	1.0 U	1.0	0.22	09/15/17 11:52	M5
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
Chlorobenzene	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
Chloroethane	ug/L	1.0 U	1.0	0.55	09/15/17 11:52	M5
Chloroform	ug/L	1.0 U	1.0	0.24	09/15/17 11:52	M5
Chloromethane	ug/L	1.0 U	1.0	0.19	09/15/17 11:52	M5
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	09/15/17 11:52	M5
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	09/15/17 11:52	M5
Dibromomethane	ug/L	1.0 U	1.0	0.37	09/15/17 11:52	M5
Ethylbenzene	ug/L	1.0 U	1.0	0.20	09/15/17 11:52	M5
Iodomethane	ug/L	50.0 U	50.0	4.6	09/15/17 11:52	M5
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	09/15/17 11:52	M5
Methylene Chloride	ug/L	1.0 U	1.0	0.43	09/15/17 11:52	M5
Naphthalene	ug/L	2.0 U	2.0	0.11	09/15/17 11:52	M5
Styrene	ug/L	1.0 U	1.0	0.16	09/15/17 11:52	M5
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	09/15/17 11:52	M5
Toluene	ug/L	1.0 U	1.0	0.11	09/15/17 11:52	M5

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REPORT OF LABORATORY ANALYSIS

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(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

METHOD BLANK: 1337463 Matrix: Water

Associated Lab Samples: 30229895001, 30229895002, 30229895003, 30229895004, 30229895006, 30229895007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	09/15/17 11:52	M5
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	09/15/17 11:52	M5
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	09/15/17 11:52	M5
Trichloroethene	ug/L	1.0 U	1.0	0.22	09/15/17 11:52	M5
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	09/15/17 11:52	M5
Vinyl acetate	ug/L	10.0 U	10.0	0.15	09/15/17 11:52	M5
Vinyl chloride	ug/L	1.0 U	1.0	0.32	09/15/17 11:52	M5
Xylene (Total)	ug/L	3.0 U	3.0	0.77	09/15/17 11:52	M5
1,2-Dichloroethane-d4 (S)	%	98	80-120		09/15/17 11:52	M5
4-Bromofluorobenzene (S)	%	101	79-129		09/15/17 11:52	M5
Dibromofluoromethane (S)	%	98	80-120		09/15/17 11:52	M5
Toluene-d8 (S)	%	98	80-120		09/15/17 11:52	M5

LABORATORY CONTROL SAMPLE: 1337464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.4	97	70-130	M5
1,1,1-Trichloroethane	ug/L	20	19.7	98	70-130	M5
1,1,2,2-Tetrachloroethane	ug/L	20	18.4	92	65-127	M5
1,1,2-Trichloroethane	ug/L	20	19.3	97	70-130	M5
1,1-Dichloroethane	ug/L	20	19.8	99	70-130	M5
1,1-Dichloroethene	ug/L	20	20.4	102	70-130	M5
1,2,3-Trichloropropane	ug/L	20	20.0	100	70-130	M5
1,2-Dibromo-3-chloropropane	ug/L	20	19.3	96	58-128	M5
1,2-Dibromoethane (EDB)	ug/L	20	19.7	98	70-130	M5
1,2-Dichlorobenzene	ug/L	20	20.0	100	70-130	M5
1,2-Dichloroethane	ug/L	20	19.1	95	70-130	M5
1,2-Dichloropropane	ug/L	20	19.1	96	70-130	M5
1,4-Dichlorobenzene	ug/L	20	20.1	101	70-130	M5
2-Butanone (MEK)	ug/L	20	20.0	100	72-170	M5
2-Hexanone	ug/L	20	18.2	91	65-151	M5
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.9	100	66-150	M5
Acetone	ug/L	20	19.2	96	30-179	M5
Acrylonitrile	ug/L	20	17.3	87	48-172	M5
Benzene	ug/L	20	20.2	101	70-130	M5
Bromochloromethane	ug/L	20	22.5	112	70-130	M5
Bromodichloromethane	ug/L	20	17.9	90	70-130	M5
Bromoform	ug/L	20	18.4	92	70-130	M5
Bromomethane	ug/L	20	25.7	128	47-174	M5
Carbon disulfide	ug/L	20	18.0	90	43-133	M5
Carbon tetrachloride	ug/L	20	18.8	94	56-143	M5
Chlorobenzene	ug/L	20	19.7	98	70-130	M5
Chloroethane	ug/L	20	18.1	91	67-139	M5
Chloroform	ug/L	20	19.0	95	70-130	M5

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QUALITY CONTROL DATA

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

LABORATORY CONTROL SAMPLE: 1337464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	20	19.1	95	57-138	M5
cis-1,2-Dichloroethene	ug/L	20	19.4	97	70-130	M5
cis-1,3-Dichloropropene	ug/L	20	18.9	94	70-130	M5
Dibromochloromethane	ug/L	20	18.7	94	70-130	M5
Dibromomethane	ug/L	20	21.8	109	70-130	M5
Ethylbenzene	ug/L	20	19.2	96	70-130	M5
Iodomethane	ug/L	20	28.8J	144	10-175	M5
Methyl-tert-butyl ether	ug/L	20	19.1	96	70-130	M5
Methylene Chloride	ug/L	20	19.8	99	55-144	M5
Naphthalene	ug/L	20	19.5	98	70-130	M5
Styrene	ug/L	20	18.9	95	70-130	M5
Tetrachloroethene	ug/L	20	20.9	105	70-130	M5
Toluene	ug/L	20	18.9	94	70-130	M5
trans-1,2-Dichloroethene	ug/L	20	19.7	98	70-130	M5
trans-1,3-Dichloropropene	ug/L	20	18.4	92	70-130	M5
trans-1,4-Dichloro-2-butene	ug/L	20	17.8	89	27-116	M5
Trichloroethene	ug/L	20	21.2	106	70-130	M5
Trichlorofluoromethane	ug/L	20	22.4	112	60-148	M5
Vinyl acetate	ug/L	20	15.3	76	30-181	M5
Vinyl chloride	ug/L	20	20.3	102	70-130	M5
Xylene (Total)	ug/L	60	58.9	98	70-130	M5
1,2-Dichloroethane-d4 (S)	%			92	80-120	M5
4-Bromofluorobenzene (S)	%			100	79-129	M5
Dibromofluoromethane (S)	%			102	80-120	M5
Toluene-d8 (S)	%			97	80-120	M5

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: 271824

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 271827

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven 3rd Quarter
Pace Project No.: 30229895

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30229895001	**Trip Blank**	EPA 8260B	271827		
30229895002	**C042-PZM004**	EPA 8260B	271827		
30229895003	**C036-PZM008**	EPA 8260B	271827		
30229895004	**C036-PZM043**	EPA 8260B	271827		
30229895005	**C041-PZM001**	EPA 8260B	271824		
30229895006	**C041-PZM036**	EPA 8260B	271827		
30229895007	**C093-PZMXXX**	EPA 8260B	271827		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

7 20

Page: 1 of 1

Section A Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone:	314-620-3056
Fax:	
Requested Due Date/TAT:	5 day

Section B Required Project Information:

Report To:	James Calenda
Copy To:	
PO Number:	
Project Name:	Coke Oven 3rd Quarter
Project Number:	170384M-1-2

Section C Invoice Information:

Attention:	Laura Sargent
Company Name:	EnviroAnalytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MD

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	DI Water	Analysis Test (Y/N)	VOC/8260B	SVOC 8270D	DRO/8015B	GRO/8015B	METALS/6010C	Mercury/7471A or 7470A	Hexavalent Chromium/7196A	Total Cyanide/9012A	PCB/8082 (soil)		Oil and Grease/1664A (ac	Oil and Grease/9071B (soil)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank	WT	G			9/13/17			2				X						X													001
2	C042-PZM004						1114		3				X						X													002
3	C036-PZM008						1230		3				X						X													003
4	C036-PZM043						1305		3				X						X													004
5	C041-PZM001						1420		3				X						X													005
6	C041-PZM036						1449		3				X						X													006
7	C093-PZMxxx						1526		3				X						X													007
8																																
9																																
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Data Package Required? (Y/N):	Leandra Glumac/ARM	9/13/17	1040	David L Hilligan/Pace	9/13/17	1627				
Data Validation Required? (Y/N):	David L Hilligan/Pace	9/13/17	1936	[signature]	9/13/17	1940				
If data package is required, attach data package checklist.	[signature]	9/13/17	2215	Ashley Hart/Pace	9-13-17	2315	3.8	Y	N	Y

WO#: 30229895

30229895

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Leandra M. Glumac

SIGNATURE of SAMPLER: Leandra Glumac

DATE Signed (MM/DD/YY): 09/13/17

*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.

F-ALL-Q-020rev.06, 2-Feb-2007

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EnviroAna. Project # 30229895

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label _____
LIMS Login ANL

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 6 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.8 °C Correction Factor: +0.0 °C Final Temp: 3.8 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AM 9-14-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -includes date/time/ID Matrix: WT	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:	X			8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.
Organic Samples checked for dechlorination:			X	14.
Filtered volume received for Dissolved tests			X	15.
All containers have been checked for preservation.			X	16.
All containers needing preservation are found to be in compliance with EPA recommendation.			X	
exceptions: (VOA) coliform, TOC, O&G, Phenolics				Initial when completed ANL / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		X		17.
Trip Blank Present:	X			18.
Trip Blank Custody Seals Present	X			
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed: / Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 20, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
1600 Sparrows Point Blvd
Suite B2
Sparrows Point, MD 21219

RE: Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on December 12, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project:	Coke Oven 4TH Quarter GW
Pace Project No.:	30238516

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30238516001	**CO02-PZM006**	Water	12/12/17 09:17	12/12/17 22:55
30238516002	**CO93-PZMXXX**	Water	12/12/17 10:32	12/12/17 22:55
30238516003	**CO18-PZM006**	Water	12/12/17 11:10	12/12/17 22:55
30238516004	**CO36-PZM008**	Water	12/12/17 12:40	12/12/17 22:55
30238516005	**CO36-PZM043**	Water	12/12/17 13:20	12/12/17 22:55
30238516006	**CO38-PZM006**	Water	12/12/17 13:55	12/12/17 22:55
30238516007	**CO38-PZM043**	Water	12/12/17 14:16	12/12/17 22:55
30238516008	**Trip Blank**	Water	12/12/17 00:01	12/12/17 22:55
30238516009	**CO37-PZM038**	Water	12/12/17 14:56	12/12/17 22:55

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SAMPLE ANALYTE COUNT

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30238516001	**CO02-PZM006**	EPA 8260B	MAK	53	PASI-PA
30238516002	**CO93-PZMXXX**	EPA 8260B	MAK	53	PASI-PA
30238516003	**CO18-PZM006**	EPA 8260B	MAK	53	PASI-PA
30238516004	**CO36-PZM008**	EPA 8260B	MAK	53	PASI-PA
30238516005	**CO36-PZM043**	EPA 8260B	MAK	53	PASI-PA
30238516006	**CO38-PZM006**	EPA 8260B	MAK	53	PASI-PA
30238516007	**CO38-PZM043**	EPA 8260B	MAK	53	PASI-PA
30238516008	**Trip Blank**	EPA 8260B	MAK	53	PASI-PA
30238516009	**CO37-PZM038**	EPA 8260B	MAK	53	PASI-PA

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO02-PZM006 **Lab ID: 30238516001** Collected: 12/12/17 09:17 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**74.5**	ug/L	50.0	14.6	5		12/19/17 00:08	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/19/17 00:08	107-13-1	
Benzene	**241000**	ug/L	1000	178	1000		12/19/17 22:58	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/19/17 00:08	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/19/17 00:08	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/19/17 00:08	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/19/17 00:08	74-83-9	
2-Butanone (MEK)	**5.0J**	ug/L	50.0	1.6	5		12/19/17 00:08	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/19/17 00:08	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/19/17 00:08	56-23-5	
Chlorobenzene	**1.4J**	ug/L	5.0	0.85	5		12/19/17 00:08	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/19/17 00:08	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/19/17 00:08	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/19/17 00:08	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/19/17 00:08	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/19/17 00:08	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/19/17 00:08	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/19/17 00:08	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/19/17 00:08	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/19/17 00:08	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/19/17 00:08	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/19/17 00:08	75-34-3	
1,2-Dichloroethane	**3.2J**	ug/L	5.0	0.92	5		12/19/17 00:08	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/19/17 00:08	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/19/17 00:08	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/19/17 00:08	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/19/17 00:08	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/19/17 00:08	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/19/17 00:08	10061-02-6	
Ethylbenzene	**335**	ug/L	5.0	0.98	5		12/19/17 00:08	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/19/17 00:08	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/19/17 00:08	74-88-4	CL
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/19/17 00:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/19/17 00:08	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/19/17 00:08	1634-04-4	
Naphthalene	**370**	ug/L	10.0	0.56	5		12/19/17 00:08	91-20-3	
Styrene	**9.2**	ug/L	5.0	0.81	5		12/19/17 00:08	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/19/17 00:08	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/19/17 00:08	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/19/17 00:08	127-18-4	
Toluene	**104**	ug/L	5.0	0.55	5		12/19/17 00:08	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/19/17 00:08	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/19/17 00:08	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/19/17 00:08	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/19/17 00:08	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/19/17 00:08	96-18-4	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO02-PZM006 **Lab ID: 30238516001** Collected: 12/12/17 09:17 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/19/17 00:08	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/19/17 00:08	75-01-4	
Xylene (Total)	**643**	ug/L	15.0	3.8	5		12/19/17 00:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	79-129		5		12/19/17 00:08	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		5		12/19/17 00:08	17060-07-0	
Toluene-d8 (S)	101	%	80-120		5		12/19/17 00:08	2037-26-5	
Dibromofluoromethane (S)	96	%	80-120		5		12/19/17 00:08	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO93-PZMXXX **Lab ID: 30238516002** Collected: 12/12/17 10:32 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**58.5**	ug/L	50.0	14.6	5		12/18/17 19:04	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/18/17 19:04	107-13-1	
Benzene	**215000**	ug/L	1000	178	1000		12/18/17 19:29	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/18/17 19:04	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 19:04	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/18/17 19:04	75-25-2	
Bromomethane	**3.5J**	ug/L	5.0	3.2	5		12/18/17 19:04	74-83-9	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	1.6	5		12/18/17 19:04	78-93-3	
Carbon disulfide	**16.4**	ug/L	5.0	1.1	5		12/18/17 19:04	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 19:04	56-23-5	
Chlorobenzene	**12.0**	ug/L	5.0	0.85	5		12/18/17 19:04	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/18/17 19:04	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 19:04	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/18/17 19:04	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/18/17 19:04	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/18/17 19:04	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 19:04	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 19:04	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/18/17 19:04	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 19:04	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/18/17 19:04	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/18/17 19:04	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/18/17 19:04	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 19:04	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/18/17 19:04	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/18/17 19:04	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/18/17 19:04	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 19:04	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/18/17 19:04	10061-02-6	
Ethylbenzene	**1400**	ug/L	5.0	0.98	5		12/18/17 19:04	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/18/17 19:04	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/18/17 19:04	74-88-4	CL
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/18/17 19:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/18/17 19:04	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 19:04	1634-04-4	
Naphthalene	**10000**	ug/L	2000	111	1000		12/18/17 19:29	91-20-3	
Styrene	**1430**	ug/L	5.0	0.81	5		12/18/17 19:04	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 19:04	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/18/17 19:04	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/18/17 19:04	127-18-4	
Toluene	**61300**	ug/L	1000	110	1000		12/18/17 19:29	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/18/17 19:04	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 19:04	79-00-5	
Trichloroethene	**1.7J**	ug/L	5.0	1.1	5		12/18/17 19:04	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/18/17 19:04	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 19:04	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO93-PZMXXX **Lab ID: 30238516002** Collected: 12/12/17 10:32 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/18/17 19:04	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/18/17 19:04	75-01-4	
Xylene (Total)	**19500**	ug/L	3000	769	1000		12/18/17 19:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	79-129		5		12/18/17 19:04	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		5		12/18/17 19:04	17060-07-0	
Toluene-d8 (S)	104	%	80-120		5		12/18/17 19:04	2037-26-5	
Dibromofluoromethane (S)	94	%	80-120		5		12/18/17 19:04	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO18-PZM006 **Lab ID: 30238516003** Collected: 12/12/17 11:10 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**92.3**	ug/L	50.0	14.6	5		12/18/17 19:55	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/18/17 19:55	107-13-1	
Benzene	**293000**	ug/L	2000	356	2000		12/18/17 20:20	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/18/17 19:55	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 19:55	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/18/17 19:55	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/18/17 19:55	74-83-9	
2-Butanone (MEK)	**10.9J**	ug/L	50.0	1.6	5		12/18/17 19:55	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 19:55	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 19:55	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/18/17 19:55	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/18/17 19:55	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 19:55	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/18/17 19:55	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/18/17 19:55	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/18/17 19:55	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 19:55	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 19:55	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/18/17 19:55	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 19:55	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/18/17 19:55	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/18/17 19:55	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/18/17 19:55	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 19:55	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/18/17 19:55	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/18/17 19:55	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/18/17 19:55	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 19:55	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/18/17 19:55	10061-02-6	
Ethylbenzene	**43.2**	ug/L	5.0	0.98	5		12/18/17 19:55	100-41-4	
2-Hexanone	**1.8J**	ug/L	50.0	1.3	5		12/18/17 19:55	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/18/17 19:55	74-88-4	CL
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/18/17 19:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/18/17 19:55	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 19:55	1634-04-4	
Naphthalene	**159**	ug/L	10.0	0.56	5		12/18/17 19:55	91-20-3	
Styrene	**3.2J**	ug/L	5.0	0.81	5		12/18/17 19:55	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 19:55	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/18/17 19:55	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/18/17 19:55	127-18-4	
Toluene	**1940**	ug/L	5.0	0.55	5		12/18/17 19:55	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/18/17 19:55	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 19:55	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 19:55	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/18/17 19:55	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 19:55	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO18-PZM006 **Lab ID: 30238516003** Collected: 12/12/17 11:10 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/18/17 19:55	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/18/17 19:55	75-01-4	
Xylene (Total)	**1010**	ug/L	15.0	3.8	5		12/18/17 19:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		5		12/18/17 19:55	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		5		12/18/17 19:55	17060-07-0	
Toluene-d8 (S)	101	%	80-120		5		12/18/17 19:55	2037-26-5	
Dibromofluoromethane (S)	94	%	80-120		5		12/18/17 19:55	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO36-PZM008 **Lab ID: 30238516004** Collected: 12/12/17 12:40 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**61.1**	ug/L	50.0	14.6	5		12/18/17 20:45	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/18/17 20:45	107-13-1	
Benzene	**9510**	ug/L	100	17.8	100		12/18/17 21:11	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/18/17 20:45	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 20:45	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/18/17 20:45	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/18/17 20:45	74-83-9	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	1.6	5		12/18/17 20:45	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 20:45	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 20:45	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/18/17 20:45	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/18/17 20:45	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 20:45	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/18/17 20:45	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/18/17 20:45	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/18/17 20:45	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 20:45	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 20:45	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/18/17 20:45	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 20:45	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/18/17 20:45	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/18/17 20:45	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/18/17 20:45	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 20:45	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/18/17 20:45	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/18/17 20:45	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/18/17 20:45	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 20:45	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/18/17 20:45	10061-02-6	
Ethylbenzene	**21.4**	ug/L	5.0	0.98	5		12/18/17 20:45	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/18/17 20:45	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/18/17 20:45	74-88-4	CL
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/18/17 20:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/18/17 20:45	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 20:45	1634-04-4	
Naphthalene	**283**	ug/L	10.0	0.56	5		12/18/17 20:45	91-20-3	
Styrene	**5.7**	ug/L	5.0	0.81	5		12/18/17 20:45	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 20:45	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/18/17 20:45	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/18/17 20:45	127-18-4	
Toluene	**1540**	ug/L	5.0	0.55	5		12/18/17 20:45	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/18/17 20:45	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 20:45	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 20:45	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/18/17 20:45	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 20:45	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO36-PZM008 **Lab ID: 30238516004** Collected: 12/12/17 12:40 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/18/17 20:45	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/18/17 20:45	75-01-4	
Xylene (Total)	**631**	ug/L	15.0	3.8	5		12/18/17 20:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	79-129		5		12/18/17 20:45	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		5		12/18/17 20:45	17060-07-0	
Toluene-d8 (S)	98	%	80-120		5		12/18/17 20:45	2037-26-5	
Dibromofluoromethane (S)	97	%	80-120		5		12/18/17 20:45	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO36-PZM043 **Lab ID: 30238516005** Collected: 12/12/17 13:20 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**45.9J**	ug/L	50.0	14.6	5		12/18/17 21:36	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/18/17 21:36	107-13-1	
Benzene	**30400**	ug/L	100	17.8	100		12/18/17 22:02	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/18/17 21:36	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 21:36	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/18/17 21:36	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/18/17 21:36	74-83-9	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	1.6	5		12/18/17 21:36	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 21:36	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 21:36	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/18/17 21:36	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/18/17 21:36	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 21:36	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/18/17 21:36	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/18/17 21:36	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/18/17 21:36	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 21:36	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 21:36	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/18/17 21:36	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 21:36	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/18/17 21:36	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/18/17 21:36	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/18/17 21:36	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 21:36	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/18/17 21:36	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/18/17 21:36	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/18/17 21:36	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 21:36	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/18/17 21:36	10061-02-6	
Ethylbenzene	**42.9**	ug/L	5.0	0.98	5		12/18/17 21:36	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/18/17 21:36	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/18/17 21:36	74-88-4	CL
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/18/17 21:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/18/17 21:36	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 21:36	1634-04-4	
Naphthalene	**812**	ug/L	10.0	0.56	5		12/18/17 21:36	91-20-3	
Styrene	**7.5**	ug/L	5.0	0.81	5		12/18/17 21:36	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 21:36	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/18/17 21:36	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/18/17 21:36	127-18-4	
Toluene	**3400**	ug/L	100	11.0	100		12/18/17 22:02	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/18/17 21:36	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 21:36	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 21:36	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/18/17 21:36	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 21:36	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO36-PZM043 **Lab ID: 30238516005** Collected: 12/12/17 13:20 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/18/17 21:36	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/18/17 21:36	75-01-4	
Xylene (Total)	**675**	ug/L	15.0	3.8	5		12/18/17 21:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-129		5		12/18/17 21:36	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		5		12/18/17 21:36	17060-07-0	
Toluene-d8 (S)	97	%	80-120		5		12/18/17 21:36	2037-26-5	
Dibromofluoromethane (S)	96	%	80-120		5		12/18/17 21:36	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO38-PZM006 **Lab ID: 30238516006** Collected: 12/12/17 13:55 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**54.7**	ug/L	50.0	14.6	5		12/18/17 22:27	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/18/17 22:27	107-13-1	
Benzene	**5690**	ug/L	100	17.8	100		12/18/17 22:52	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/18/17 22:27	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 22:27	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/18/17 22:27	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/18/17 22:27	74-83-9	
2-Butanone (MEK)	**2.6J**	ug/L	50.0	1.6	5		12/18/17 22:27	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 22:27	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 22:27	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/18/17 22:27	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/18/17 22:27	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 22:27	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/18/17 22:27	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/18/17 22:27	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/18/17 22:27	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 22:27	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 22:27	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/18/17 22:27	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 22:27	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/18/17 22:27	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/18/17 22:27	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/18/17 22:27	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 22:27	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/18/17 22:27	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/18/17 22:27	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/18/17 22:27	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 22:27	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/18/17 22:27	10061-02-6	
Ethylbenzene	**72.2**	ug/L	5.0	0.98	5		12/18/17 22:27	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/18/17 22:27	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/18/17 22:27	74-88-4	CL
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/18/17 22:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/18/17 22:27	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 22:27	1634-04-4	
Naphthalene	**1190**	ug/L	10.0	0.56	5		12/18/17 22:27	91-20-3	
Styrene	**42.5**	ug/L	5.0	0.81	5		12/18/17 22:27	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 22:27	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/18/17 22:27	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/18/17 22:27	127-18-4	
Toluene	**970**	ug/L	5.0	0.55	5		12/18/17 22:27	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/18/17 22:27	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 22:27	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 22:27	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/18/17 22:27	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 22:27	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO38-PZM006 **Lab ID: 30238516006** Collected: 12/12/17 13:55 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/18/17 22:27	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/18/17 22:27	75-01-4	
Xylene (Total)	**549**	ug/L	15.0	3.8	5		12/18/17 22:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	79-129		5		12/18/17 22:27	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		5		12/18/17 22:27	17060-07-0	
Toluene-d8 (S)	97	%	80-120		5		12/18/17 22:27	2037-26-5	
Dibromofluoromethane (S)	98	%	80-120		5		12/18/17 22:27	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO38-PZM043 **Lab ID: 30238516007** Collected: 12/12/17 14:16 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**3.1J**	ug/L	10.0	2.9	1		12/19/17 22:45	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/19/17 22:45	107-13-1	
Benzene	**1.2**	ug/L	1.0	0.18	1		12/19/17 22:45	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/19/17 22:45	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/19/17 22:45	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/19/17 22:45	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/19/17 22:45	74-83-9	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	0.31	1		12/19/17 22:45	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/19/17 22:45	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/19/17 22:45	56-23-5	
Chlorobenzene	**0.37J**	ug/L	1.0	0.17	1		12/19/17 22:45	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/19/17 22:45	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/19/17 22:45	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/19/17 22:45	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/19/17 22:45	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/19/17 22:45	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/19/17 22:45	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/19/17 22:45	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/19/17 22:45	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/19/17 22:45	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/19/17 22:45	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/19/17 22:45	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/19/17 22:45	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/19/17 22:45	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/19/17 22:45	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/19/17 22:45	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/19/17 22:45	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/19/17 22:45	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/19/17 22:45	10061-02-6	
Ethylbenzene	**0.23J**	ug/L	1.0	0.20	1		12/19/17 22:45	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/19/17 22:45	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/19/17 22:45	74-88-4	CL
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/19/17 22:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/19/17 22:45	108-10-1	
Methyl-tert-butyl ether	**0.35J**	ug/L	1.0	0.14	1		12/19/17 22:45	1634-04-4	
Naphthalene	**1.1J**	ug/L	2.0	0.11	1		12/19/17 22:45	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		12/19/17 22:45	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/19/17 22:45	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/19/17 22:45	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/19/17 22:45	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.11	1		12/19/17 22:45	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/19/17 22:45	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/19/17 22:45	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/19/17 22:45	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/19/17 22:45	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/19/17 22:45	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO38-PZM043 **Lab ID: 30238516007** Collected: 12/12/17 14:16 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/19/17 22:45	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/19/17 22:45	75-01-4	
Xylene (Total)	**1.2J**	ug/L	3.0	0.77	1		12/19/17 22:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-129		1		12/19/17 22:45	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		12/19/17 22:45	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		12/19/17 22:45	2037-26-5	
Dibromofluoromethane (S)	102	%	80-120		1		12/19/17 22:45	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: Trip Blank **Lab ID: 30238516008** Collected: 12/12/17 00:01 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	5.0	2.9	1		12/18/17 17:48	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/18/17 17:48	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.18	1		12/18/17 17:48	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 17:48	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 17:48	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 17:48	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/18/17 17:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		12/18/17 17:48	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/18/17 17:48	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 17:48	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 17:48	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/18/17 17:48	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/18/17 17:48	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 17:48	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		12/18/17 17:48	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 17:48	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 17:48	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/18/17 17:48	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 17:48	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/18/17 17:48	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		12/18/17 17:48	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/18/17 17:48	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/18/17 17:48	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/18/17 17:48	75-35-4	
cis-1,2-Dichloroethene	**0.61J**	ug/L	1.0	0.19	1		12/18/17 17:48	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 17:48	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 17:48	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 17:48	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 17:48	10061-02-6	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		12/18/17 17:48	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.26	1		12/18/17 17:48	591-78-6	
Iodomethane	ND	ug/L	1.0	4.6	1		12/18/17 17:48	74-88-4	CL
Methylene Chloride	**0.82J**	ug/L	1.0	0.43	1		12/18/17 17:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		12/18/17 17:48	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 17:48	1634-04-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		12/18/17 17:48	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		12/18/17 17:48	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/18/17 17:48	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 17:48	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/18/17 17:48	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 17:48	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 17:48	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/18/17 17:48	79-00-5	
Trichloroethene	**0.42J**	ug/L	1.0	0.22	1		12/18/17 17:48	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/18/17 17:48	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/18/17 17:48	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: Trip Blank **Lab ID: 30238516008** Collected: 12/12/17 00:01 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		12/18/17 17:48	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/18/17 17:48	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.77	1		12/18/17 17:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	79-129		1		12/18/17 17:48	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		12/18/17 17:48	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		12/18/17 17:48	2037-26-5	
Dibromofluoromethane (S)	100	%	80-120		1		12/18/17 17:48	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO37-PZM038 **Lab ID: 30238516009** Collected: 12/12/17 14:56 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**3.2J**	ug/L	10.0	2.9	1		12/18/17 18:13	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/18/17 18:13	107-13-1	
Benzene	**9170**	ug/L	100	17.8	100		12/19/17 23:23	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 18:13	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:13	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:13	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/18/17 18:13	74-83-9	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	0.31	1		12/18/17 18:13	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/18/17 18:13	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:13	56-23-5	
Chlorobenzene	**0.52J**	ug/L	1.0	0.17	1		12/18/17 18:13	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/18/17 18:13	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/18/17 18:13	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 18:13	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/18/17 18:13	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 18:13	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 18:13	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/18/17 18:13	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:13	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/18/17 18:13	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/18/17 18:13	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/18/17 18:13	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/18/17 18:13	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/18/17 18:13	75-35-4	
cis-1,2-Dichloroethene	**0.28J**	ug/L	1.0	0.19	1		12/18/17 18:13	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 18:13	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 18:13	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:13	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:13	10061-02-6	
Ethylbenzene	**270**	ug/L	1.0	0.20	1		12/18/17 18:13	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/18/17 18:13	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/18/17 18:13	74-88-4	CL
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/18/17 18:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/18/17 18:13	108-10-1	
Methyl-tert-butyl ether	**0.20J**	ug/L	1.0	0.14	1		12/18/17 18:13	1634-04-4	
Naphthalene	**1370**	ug/L	200	11.1	100		12/19/17 23:23	91-20-3	
Styrene	**338**	ug/L	100	16.2	100		12/19/17 23:23	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/18/17 18:13	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:13	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/18/17 18:13	127-18-4	
Toluene	**6980**	ug/L	100	11.0	100		12/19/17 23:23	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 18:13	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/18/17 18:13	79-00-5	
Trichloroethene	**0.53J**	ug/L	1.0	0.22	1		12/18/17 18:13	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/18/17 18:13	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/18/17 18:13	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Sample: CO37-PZM038 **Lab ID: 30238516009** Collected: 12/12/17 14:56 Received: 12/12/17 22:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/18/17 18:13	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/18/17 18:13	75-01-4	
Xylene (Total)	**2080**	ug/L	300	76.9	100		12/19/17 23:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	79-129		1		12/18/17 18:13	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		12/18/17 18:13	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		12/18/17 18:13	2037-26-5	
Dibromofluoromethane (S)	93	%	80-120		1		12/18/17 18:13	1868-53-7	

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QUALITY CONTROL DATA

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

QC Batch: 282677 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30238516001, 30238516002, 30238516003, 30238516004, 30238516005, 30238516006, 30238516007, 30238516008, 30238516009

METHOD BLANK: 1387951 | Matrix: Water
Associated Lab Samples: 30238516001, 30238516002, 30238516003, 30238516004, 30238516005, 30238516006, 30238516007, 30238516008, 30238516009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	12/18/17 15:15	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	12/18/17 15:15	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	12/18/17 15:15	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	12/18/17 15:15	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	12/18/17 15:15	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	12/18/17 15:15	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	12/18/17 15:15	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	12/18/17 15:15	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	12/18/17 15:15	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	12/18/17 15:15	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	12/18/17 15:15	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	12/18/17 15:15	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	12/18/17 15:15	
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	12/18/17 15:15	
2-Hexanone	ug/L	10.0 U	10.0	0.26	12/18/17 15:15	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	12/18/17 15:15	
Acetone	ug/L	10.0 U	10.0	2.9	12/18/17 15:15	
Acrylonitrile	ug/L	4.0 U	4.0	0.41	12/18/17 15:15	
Benzene	ug/L	1.0 U	1.0	0.18	12/18/17 15:15	
Bromochloromethane	ug/L	1.0 U	1.0	0.25	12/18/17 15:15	
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	12/18/17 15:15	
Bromoform	ug/L	1.0 U	1.0	0.14	12/18/17 15:15	
Bromomethane	ug/L	1.0 U	1.0	0.64	12/18/17 15:15	
Carbon disulfide	ug/L	1.0 U	1.0	0.22	12/18/17 15:15	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	12/18/17 15:15	
Chlorobenzene	ug/L	1.0 U	1.0	0.17	12/18/17 15:15	
Chloroethane	ug/L	1.0 U	1.0	0.55	12/18/17 15:15	
Chloroform	ug/L	1.0 U	1.0	0.24	12/18/17 15:15	
Chloromethane	ug/L	1.0 U	1.0	0.19	12/18/17 15:15	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	12/18/17 15:15	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	12/18/17 15:15	
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	12/18/17 15:15	
Dibromomethane	ug/L	1.0 U	1.0	0.37	12/18/17 15:15	
Ethylbenzene	ug/L	1.0 U	1.0	0.20	12/18/17 15:15	
Iodomethane	ug/L	50.0 U	50.0	4.6	12/18/17 15:15	CL
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	12/18/17 15:15	
Methylene Chloride	ug/L	1.0 U	1.0	0.43	12/18/17 15:15	
Naphthalene	ug/L	2.0 U	2.0	0.11	12/18/17 15:15	
Styrene	ug/L	1.0 U	1.0	0.16	12/18/17 15:15	
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	12/18/17 15:15	

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.

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QUALITY CONTROL DATA

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

METHOD BLANK: 1387951 Matrix: Water

Associated Lab Samples: 30238516001, 30238516002, 30238516003, 30238516004, 30238516005, 30238516006, 30238516007, 30238516008, 30238516009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.11	12/18/17 15:15	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	12/18/17 15:15	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	12/18/17 15:15	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	12/18/17 15:15	
Trichloroethene	ug/L	1.0 U	1.0	0.22	12/18/17 15:15	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	12/18/17 15:15	
Vinyl acetate	ug/L	10.0 U	10.0	0.15	12/18/17 15:15	
Vinyl chloride	ug/L	1.0 U	1.0	0.32	12/18/17 15:15	
Xylene (Total)	ug/L	3.0 U	3.0	0.77	12/18/17 15:15	
1,2-Dichloroethane-d4 (S)	%	105	80-120		12/18/17 15:15	
4-Bromofluorobenzene (S)	%	97	79-129		12/18/17 15:15	
Dibromofluoromethane (S)	%	104	80-120		12/18/17 15:15	
Toluene-d8 (S)	%	97	80-120		12/18/17 15:15	

LABORATORY CONTROL SAMPLE: 1387952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.1	101	70-130	
1,1,1-Trichloroethane	ug/L	20	20.1	101	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	65-127	
1,1,2-Trichloroethane	ug/L	20	19.7	98	70-130	
1,1-Dichloroethane	ug/L	20	20.3	101	70-130	
1,1-Dichloroethene	ug/L	20	21.5	108	70-130	
1,2,3-Trichloropropane	ug/L	20	19.1	96	70-130	
1,2-Dibromo-3-chloropropane	ug/L	20	19.7	98	58-128	
1,2-Dibromoethane (EDB)	ug/L	20	19.9	99	70-130	
1,2-Dichlorobenzene	ug/L	20	20.5	102	70-130	
1,2-Dichloroethane	ug/L	20	19.3	96	70-130	
1,2-Dichloropropane	ug/L	20	19.7	98	70-130	
1,4-Dichlorobenzene	ug/L	20	19.9	99	70-130	
2-Butanone (MEK)	ug/L	20	19.1	96	72-170	
2-Hexanone	ug/L	20	19.4	97	65-151	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.6	98	66-150	
Acetone	ug/L	20	18.2	91	30-179	
Acrylonitrile	ug/L	20	20.1	101	48-172	
Benzene	ug/L	20	19.8	99	70-130	
Bromochloromethane	ug/L	20	19.9	100	70-130	
Bromodichloromethane	ug/L	20	19.9	99	70-130	
Bromoform	ug/L	20	19.3	96	70-130	
Bromomethane	ug/L	20	13.3	66	47-174	
Carbon disulfide	ug/L	20	19.7	99	43-133	
Carbon tetrachloride	ug/L	20	21.5	107	56-143	
Chlorobenzene	ug/L	20	19.6	98	70-130	

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.

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

LABORATORY CONTROL SAMPLE: 1387952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	20.5	102	67-139	
Chloroform	ug/L	20	19.2	96	70-130	
Chloromethane	ug/L	20	14.0	70	57-138	
cis-1,2-Dichloroethene	ug/L	20	19.4	97	70-130	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	70-130	
Dibromochloromethane	ug/L	20	19.8	99	70-130	
Dibromomethane	ug/L	20	19.8	99	70-130	
Ethylbenzene	ug/L	20	20.6	103	70-130	
Iodomethane	ug/L	20	9.0J	45	10-175	CL
Methyl-tert-butyl ether	ug/L	20	19.6	98	70-130	
Methylene Chloride	ug/L	20	18.8	94	55-144	
Naphthalene	ug/L	20	20.6	103	70-130	
Styrene	ug/L	20	20.5	103	70-130	
Tetrachloroethene	ug/L	20	20.4	102	70-130	
Toluene	ug/L	20	19.8	99	70-130	
trans-1,2-Dichloroethene	ug/L	20	20.1	101	70-130	
trans-1,3-Dichloropropene	ug/L	20	19.5	98	70-130	
trans-1,4-Dichloro-2-butene	ug/L	20	19.2	96	27-116	
Trichloroethene	ug/L	20	20.0	100	70-130	
Trichlorofluoromethane	ug/L	20	25.3	126	60-148	
Vinyl acetate	ug/L	20	19.2	96	30-181	
Vinyl chloride	ug/L	20	18.1	91	70-130	
Xylene (Total)	ug/L	60	60.7	101	70-130	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			98	79-129	
Dibromofluoromethane (S)	%			101	80-120	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1388197 1388198

Parameter	Units	30238749001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	20	20	17.4	17.7	87	89	51-124	2	30	
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	17.6	17.4	88	87	79-129	1	30	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	16.7	15.9	83	79	57-118	5	30	
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	17.5	17.6	87	88	68-117	1	30	
1,1-Dichloroethane	ug/L	1.0 U	20	20	18.5	17.7	92	89	74-119	4	30	
1,1-Dichloroethene	ug/L	1.5	20	20	18.4	18.8	85	87	63-126	2	30	
1,2,3-Trichloropropane	ug/L	2.3	20	20	18.4	18.5	81	81	56-129	1	30	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	20	20	14.0	13.4	70	67	53-120	5	30	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	20	20	17.0	17.6	85	88	69-124	3	30	
1,2-Dichlorobenzene	ug/L	3.5	20	20	20.5	19.8	85	82	72-119	3	30	
1,2-Dichloroethane	ug/L	0.20J	20	20	16.4	16.5	81	81	69-116	0	30	
1,2-Dichloropropane	ug/L	0.50J	20	20	17.4	17.4	84	84	63-118	0	30	

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

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1388197 1388198

Parameter	Units	30238749001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	1.0	20	20	18.4	17.5	87	82	72-118	5	30	
2-Butanone (MEK)	ug/L	10.0 U	20	20	22.0	22.0	110	110	72-168	0	30	
2-Hexanone	ug/L	10.0 U	20	20	19.1	19.2	96	96	66-143	1	30	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	20	20	22.7	22.7	113	113	67-145	0	30	
Acetone	ug/L	7.8J	20	20	22.1	22.9	72	76	15-175	4	30	
Acrylonitrile	ug/L	4.0 U	20	20	15.9	15.9	80	80	36-165	0	30	
Benzene	ug/L	1.6	20	20	23.2	19.9	108	92	67-121	15	30	
Bromochloromethane	ug/L	1.0 U	20	20	16.4	17.6	82	88	62-128	7	30	
Bromodichloromethane	ug/L	1.0 U	20	20	17.6	16.9	88	84	66-127	4	30	
Bromoform	ug/L	1.0 U	20	20	13.9	14.2	69	71	71-127	2	30	ML
Bromomethane	ug/L	1.0 U	20	20	0.98J	1.6	3	6	10-156		30	ML
Carbon disulfide	ug/L	1.0 U	20	20	16.9	18.0	85	90	45-131	6	30	
Carbon tetrachloride	ug/L	1.0 U	20	20	17.7	17.9	88	89	69-134	1	30	
Chlorobenzene	ug/L	21.5	20	20	39.3	38.8	89	86	69-119	1	30	
Chloroethane	ug/L	1.0 U	20	20	18.7	15.0	94	75	60-156	22	30	
Chloroform	ug/L	1.0 U	20	20	16.8	16.9	83	84	69-115	1	30	
Chloromethane	ug/L	1.0 U	20	20	19.0	20.1	95	100	52-145	6	30	
cis-1,2-Dichloroethene	ug/L	301	20	20	301	296	1	-23	65-120	2	30	ML
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	16.3	16.7	82	83	57-125	2	30	
Dibromochloromethane	ug/L	1.0 U	20	20	16.3	16.3	81	81	64-131	0	30	
Dibromomethane	ug/L	1.0 U	20	20	17.8	17.8	89	89	56-133	0	30	
Ethylbenzene	ug/L	1.0 U	20	20	18.2	18.0	91	90	70-127	1	30	
Iodomethane	ug/L	50.0 U	20	20	50.0 U	50.0 U	5	9	10-152		30	CL,ML
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	20.7	19.6	104	98	79-135	6	30	
Methylene Chloride	ug/L	1.0 U	20	20	15.4	15.6	77	78	54-133	1	30	
Naphthalene	ug/L	2.0 U	20	20	17.0	16.6	85	83	62-131	2	30	
Styrene	ug/L	1.0 U	20	20	17.7	17.6	88	88	65-121	1	30	
Tetrachloroethene	ug/L	1.0 U	20	20	18.5	19.2	92	96	77-125	4	30	
Toluene	ug/L	0.27J	20	20	19.0	18.7	94	92	77-125	2	30	
trans-1,2-Dichloroethene	ug/L	6.3	20	20	23.7	23.0	87	84	70-119	3	30	
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	15.4	15.5	77	78	52-125	0	30	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	20	20	6.2	6.2	31	31	13-100	0	30	
Trichloroethene	ug/L	88.8	20	20	98.5	96.6	48	39	74-128	2	30	ML
Trichlorofluoromethane	ug/L	1.0 U	20	20	28.5	29.8	143	149	54-164	4	30	
Vinyl acetate	ug/L	10.0 U	20	20	10.6	10.0	53	50	15-173	6	30	
Vinyl chloride	ug/L	34.6	20	20	51.2	50.9	83	82	60-131	1	30	
Xylene (Total)	ug/L	3.0 U	60	60	54.4	55.2	91	92	69-128	2	30	
1,2-Dichloroethane-d4 (S)	%						99	99	80-120			
4-Bromofluorobenzene (S)	%						100	98	79-129			
Dibromofluoromethane (S)	%						99	102	80-120			
Toluene-d8 (S)	%						99	99	80-120			

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven 4TH Quarter GW
Pace Project No.: 30238516

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30238516001	**CO02-PZM006**	EPA 8260B	282677		
30238516002	**CO93-PZMXXX**	EPA 8260B	282677		
30238516003	**CO18-PZM006**	EPA 8260B	282677		
30238516004	**CO36-PZM008**	EPA 8260B	282677		
30238516005	**CO36-PZM043**	EPA 8260B	282677		
30238516006	**CO38-PZM006**	EPA 8260B	282677		
30238516007	**CO38-PZM043**	EPA 8260B	282677		
30238516008	**Trip Blank**	EPA 8260B	282677		
30238516009	**CO37-PZM038**	EPA 8260B	282677		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone:	314-620-3056
Fax:	
Requested Due Date/TAT:	5-day

Section B Required Project Information:

Report To:	James Calenda
Copy To:	Steve Kabis
PO Number:	
Project Name:	Coke oven 4th quarter GW
Project Number:	170384m-1

Section C Invoice Information:

Attention:	Laura Sargent
Company Name:	EnviroAnalytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MD

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW WT
WATER	WW
WASTE WATER	P
PRODUCT	SL
SOIL/SOLID	OL
OIL	WP
WIPE	AR
AIR	OT
OTHER	TS
TISSUE	

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

WO# : 30238516

30238516

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOCs + naphthalene	Resi	Pace Project No./ Lab I.D.
1	C002-PZM006	WT	G			12-12-17	917		3				3						X		001
2	C093-PZMXXX	WT	G				1032		3				3						X		002
3	C018-PZM006	WT	G				1110		3				3						X		003
4	C036-PZM008	WT	G				1240		3				3						X		004
5	C036-PZM043	WT	G				1320		3				3						X		005
6	C038-PZM006	WT	G				1355		3				3						X		006
7	C038-PZM ~~038~~ 043	WT	G				1416		3				3						X		007
8	Trip Blank	WT	G				—		2				2						X		008
9	C037-PZM038	WT	G				1456		3				3						X		009
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Data Package Required? (Y/N):	[signature]	12-12-17	1546	[signature] Pace	12/12/17	1630				
Data Validation Required? (Y/N):	[signature] Pace	12/12/17	1935	[signature]	12/12/17	1835				
If data package is required, attach data package checklist.	[signature]	12/12/17	2255	[signature] Pace	12-12-17	2255	1.0	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12-12-17

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EnviroAna. Project # 30238516

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label AM
LIMS Login BLM

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 8 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.6 °C Correction Factor: +0.0 °C Final Temp: 1.6 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AM 12-13-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:	X			8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.
Organic Samples checked for dechlorination:			X	14.
Filtered volume received for Dissolved tests			X	15.
All containers have been checked for preservation.			X	16.
All containers needing preservation are found to be in compliance with EPA recommendation.			X	
exceptions: (VOA,) coliform, TOC, O&G, Phenolics				Initial when completed / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		X		17.
Trip Blank Present:	X			18.
Trip Blank Custody Seals Present	X			
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed: / Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: One vial from sample 005 is frozen

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 28, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
1600 Sparrows Point Blvd
Suite B2
Sparrows Point, MD 21219

RE: Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on December 18, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project:	Coke Oven 4th Q 2017
Pace Project No.:	30239093

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30239093001	**CO55-PZM000**	Water	12/18/17 09:15	12/18/17 22:35
30239093002	**CO57-PZP002**	Water	12/18/17 10:02	12/18/17 22:35
30239093003	**CO30-PZM015**	Water	12/18/17 11:38	12/18/17 22:35
30239093004	**CO30-PZM060**	Water	12/18/17 12:05	12/18/17 22:35
30239093005	**CO104-PZMXXX**	Water	12/18/17 13:05	12/18/17 22:35
30239093006	**CO103-PZMXXX**	Water	12/18/17 14:08	12/18/17 22:35
30239093007	**CO102-PZMXXX**	Water	12/18/17 14:46	12/18/17 22:35
30239093008	**Trip Blank**	Water	12/18/17 00:01	12/18/17 22:35

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SAMPLE ANALYTE COUNT

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30239093001	**CO55-PZM000**	EPA 8260B	MAK	53	PASI-PA
30239093002	**CO57-PZP002**	EPA 8260B	MAK	53	PASI-PA
30239093003	**CO30-PZM015**	EPA 8260B	MAK	53	PASI-PA
30239093004	**CO30-PZM060**	EPA 8260B	MAK	53	PASI-PA
30239093005	**CO104-PZMXXX**	EPA 8260B	MAK	53	PASI-PA
30239093006	**CO103-PZMXXX**	EPA 8260B	MAK	53	PASI-PA
30239093007	**CO102-PZMXXX**	EPA 8260B	MAK	53	PASI-PA
30239093008	**Trip Blank**	EPA 8260B	MAK	53	PASI-PA

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO55-PZM000 **Lab ID: 30239093001** Collected: 12/18/17 09:15 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**6.0J**	ug/L	10.0	2.9	1		12/26/17 22:08	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 22:08	107-13-1	
Benzene	**47.5**	ug/L	1.0	0.18	1		12/26/17 22:08	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 22:08	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 22:08	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 22:08	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/26/17 22:08	74-83-9	
2-Butanone (MEK)	**1.8J**	ug/L	10.0	0.31	1		12/26/17 22:08	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 22:08	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 22:08	56-23-5	
Chlorobenzene	**0.32J**	ug/L	1.0	0.17	1		12/26/17 22:08	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 22:08	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/26/17 22:08	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 22:08	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/26/17 22:08	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 22:08	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 22:08	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 22:08	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 22:08	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 22:08	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/26/17 22:08	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 22:08	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 22:08	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 22:08	75-35-4	
cis-1,2-Dichloroethene	**1.9**	ug/L	1.0	0.19	1		12/26/17 22:08	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 22:08	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 22:08	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 22:08	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 22:08	10061-02-6	
Ethylbenzene	**3.0**	ug/L	1.0	0.20	1		12/26/17 22:08	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/26/17 22:08	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/26/17 22:08	74-88-4	CH
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 22:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/26/17 22:08	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 22:08	1634-04-4	
Naphthalene	**331**	ug/L	2.0	0.11	1		12/26/17 22:08	91-20-3	
Styrene	**2.3**	ug/L	1.0	0.16	1		12/26/17 22:08	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 22:08	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 22:08	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 22:08	127-18-4	
Toluene	**32.0**	ug/L	1.0	0.11	1		12/26/17 22:08	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 22:08	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 22:08	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 22:08	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 22:08	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 22:08	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO55-PZM000 **Lab ID: 30239093001** Collected: 12/18/17 09:15 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/26/17 22:08	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 22:08	75-01-4	
Xylene (Total)	**54.7**	ug/L	3.0	0.77	1		12/26/17 22:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	79-129		1		12/26/17 22:08	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		12/26/17 22:08	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		12/26/17 22:08	2037-26-5	
Dibromofluoromethane (S)	100	%	80-120		1		12/26/17 22:08	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO57-PZP002 **Lab ID: 30239093002** Collected: 12/18/17 10:02 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**6.4J**	ug/L	10.0	2.9	1		12/26/17 17:29	67-64-1	
Benzene	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 17:29	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 17:29	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 17:29	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 17:29	75-25-2	
Bromomethane	**0.95J**	ug/L	1.0	0.64	1		12/26/17 17:29	74-83-9	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	0.31	1		12/26/17 17:29	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 17:29	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 17:29	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 17:29	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 17:29	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/26/17 17:29	67-66-3	
Chloromethane	**3.3**	ug/L	1.0	0.19	1		12/26/17 17:29	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/26/17 17:29	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 17:29	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 17:29	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 17:29	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 17:29	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 17:29	106-46-7	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 17:29	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 17:29	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 17:29	75-35-4	
cis-1,2-Dichloroethene	**0.29J**	ug/L	1.0	0.19	1		12/26/17 17:29	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 17:29	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 17:29	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 17:29	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 17:29	10061-02-6	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		12/26/17 17:29	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/26/17 17:29	591-78-6	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 17:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/26/17 17:29	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 17:29	1634-04-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		12/26/17 17:29	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		12/26/17 17:29	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 17:29	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 17:29	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 17:29	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 17:29	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 17:29	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 17:29	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 17:29	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 17:29	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 17:29	96-18-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 17:29	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.77	1		12/26/17 17:29	1330-20-7	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/26/17 17:29	108-05-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO57-PZP002 **Lab ID: 30239093002** Collected: 12/18/17 10:02 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 17:29	107-13-1	
Iodomethane	**5.0J**	ug/L	50.0	4.6	1		12/26/17 17:29	74-88-4	CH
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/26/17 17:29	110-57-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	79-129		1		12/26/17 17:29	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		12/26/17 17:29	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		12/26/17 17:29	2037-26-5	
Dibromofluoromethane (S)	100	%	80-120		1		12/26/17 17:29	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO30-PZM015 **Lab ID: 30239093003** Collected: 12/18/17 11:38 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**50.0 U**	ug/L	50.0	14.6	5		12/26/17 22:59	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/26/17 22:59	107-13-1	
Benzene	**67500**	ug/L	500	89.0	500		12/26/17 23:24	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/26/17 22:59	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/26/17 22:59	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/26/17 22:59	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/26/17 22:59	74-83-9	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	1.6	5		12/26/17 22:59	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 22:59	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/26/17 22:59	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/26/17 22:59	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/26/17 22:59	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/26/17 22:59	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/26/17 22:59	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/26/17 22:59	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/26/17 22:59	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/26/17 22:59	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/26/17 22:59	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/26/17 22:59	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 22:59	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/26/17 22:59	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/26/17 22:59	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/26/17 22:59	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 22:59	75-35-4	
cis-1,2-Dichloroethene	**6.0**	ug/L	5.0	0.94	5		12/26/17 22:59	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/26/17 22:59	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/26/17 22:59	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/26/17 22:59	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/26/17 22:59	10061-02-6	
Ethylbenzene	**102**	ug/L	5.0	0.98	5		12/26/17 22:59	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/26/17 22:59	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/26/17 22:59	74-88-4	CH
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/26/17 22:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/26/17 22:59	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/26/17 22:59	1634-04-4	
Naphthalene	**3440**	ug/L	1000	55.5	500		12/26/17 23:24	91-20-3	
Styrene	**15.5**	ug/L	5.0	0.81	5		12/26/17 22:59	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/26/17 22:59	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/26/17 22:59	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/26/17 22:59	127-18-4	
Toluene	**4720**	ug/L	500	55.0	500		12/26/17 23:24	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/26/17 22:59	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/26/17 22:59	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 22:59	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/26/17 22:59	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/26/17 22:59	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO30-PZM015 **Lab ID: 30239093003** Collected: 12/18/17 11:38 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/26/17 22:59	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/26/17 22:59	75-01-4	
Xylene (Total)	**1440**	ug/L	15.0	3.8	5		12/26/17 22:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-129		5		12/26/17 22:59	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		5		12/26/17 22:59	17060-07-0	
Toluene-d8 (S)	99	%	80-120		5		12/26/17 22:59	2037-26-5	
Dibromofluoromethane (S)	97	%	80-120		5		12/26/17 22:59	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO30-PZM060 **Lab ID: 30239093004** Collected: 12/18/17 12:05 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**10.0 U**	ug/L	10.0	2.9	1		12/26/17 17:55	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 17:55	107-13-1	
Benzene	**8.1**	ug/L	1.0	0.18	1		12/26/17 17:55	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 17:55	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 17:55	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 17:55	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/26/17 17:55	74-83-9	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	0.31	1		12/26/17 17:55	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 17:55	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 17:55	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 17:55	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 17:55	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/26/17 17:55	67-66-3	
Chloromethane	**1.3**	ug/L	1.0	0.19	1		12/26/17 17:55	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/26/17 17:55	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 17:55	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 17:55	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 17:55	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 17:55	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 17:55	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/26/17 17:55	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 17:55	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 17:55	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 17:55	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 17:55	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 17:55	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 17:55	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 17:55	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 17:55	10061-02-6	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		12/26/17 17:55	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/26/17 17:55	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/26/17 17:55	74-88-4	CH
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 17:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/26/17 17:55	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 17:55	1634-04-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		12/26/17 17:55	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		12/26/17 17:55	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 17:55	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 17:55	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 17:55	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 17:55	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 17:55	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 17:55	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 17:55	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 17:55	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 17:55	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO30-PZM060 **Lab ID: 30239093004** Collected: 12/18/17 12:05 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/26/17 17:55	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 17:55	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.77	1		12/26/17 17:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-129		1		12/26/17 17:55	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		12/26/17 17:55	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		12/26/17 17:55	2037-26-5	
Dibromofluoromethane (S)	102	%	80-120		1		12/26/17 17:55	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO104-PZMXXX **Lab ID: 30239093005** Collected: 12/18/17 13:05 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**10.0 U**	ug/L	10.0	2.9	1		12/26/17 18:20	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 18:20	107-13-1	
Benzene	**4.1**	ug/L	1.0	0.18	1		12/26/17 18:20	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 18:20	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 18:20	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:20	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/26/17 18:20	74-83-9	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	0.31	1		12/26/17 18:20	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 18:20	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 18:20	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 18:20	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 18:20	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/26/17 18:20	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 18:20	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/26/17 18:20	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 18:20	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 18:20	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 18:20	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:20	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 18:20	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/26/17 18:20	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 18:20	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 18:20	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 18:20	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 18:20	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 18:20	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 18:20	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:20	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 18:20	10061-02-6	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		12/26/17 18:20	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/26/17 18:20	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/26/17 18:20	74-88-4	CH
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 18:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/26/17 18:20	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:20	1634-04-4	
Naphthalene	**1.1J**	ug/L	2.0	0.11	1		12/26/17 18:20	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		12/26/17 18:20	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 18:20	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:20	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 18:20	127-18-4	
Toluene	**0.27J**	ug/L	1.0	0.11	1		12/26/17 18:20	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 18:20	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 18:20	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 18:20	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 18:20	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 18:20	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO104-PZMXXX **Lab ID: 30239093005** Collected: 12/18/17 13:05 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/26/17 18:20	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 18:20	75-01-4	
Xylene (Total)	**3.0 U**	ug/L	3.0	0.77	1		12/26/17 18:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-129		1		12/26/17 18:20	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		12/26/17 18:20	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		12/26/17 18:20	2037-26-5	
Dibromofluoromethane (S)	105	%	80-120		1		12/26/17 18:20	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO103-PZMXXX **Lab ID: 30239093006** Collected: 12/18/17 14:08 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**24.4J**	ug/L	50.0	14.6	5		12/26/17 23:49	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/26/17 23:49	107-13-1	
Benzene	**19700**	ug/L	200	35.6	200		12/27/17 00:14	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/26/17 23:49	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/26/17 23:49	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/26/17 23:49	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/26/17 23:49	74-83-9	
2-Butanone (MEK)	**4.7J**	ug/L	50.0	1.6	5		12/26/17 23:49	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 23:49	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/26/17 23:49	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/26/17 23:49	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/26/17 23:49	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/26/17 23:49	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/26/17 23:49	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/26/17 23:49	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/26/17 23:49	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/26/17 23:49	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/26/17 23:49	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/26/17 23:49	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 23:49	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/26/17 23:49	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/26/17 23:49	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/26/17 23:49	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 23:49	75-35-4	
cis-1,2-Dichloroethene	**3.8J**	ug/L	5.0	0.94	5		12/26/17 23:49	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/26/17 23:49	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/26/17 23:49	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/26/17 23:49	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/26/17 23:49	10061-02-6	
Ethylbenzene	**48.7**	ug/L	5.0	0.98	5		12/26/17 23:49	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/26/17 23:49	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/26/17 23:49	74-88-4	CH
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/26/17 23:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/26/17 23:49	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/26/17 23:49	1634-04-4	
Naphthalene	**3510**	ug/L	400	22.2	200		12/27/17 00:14	91-20-3	
Styrene	**10.1**	ug/L	5.0	0.81	5		12/26/17 23:49	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/26/17 23:49	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/26/17 23:49	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/26/17 23:49	127-18-4	
Toluene	**1890**	ug/L	5.0	0.55	5		12/26/17 23:49	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/26/17 23:49	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/26/17 23:49	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 23:49	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/26/17 23:49	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/26/17 23:49	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO103-PZMXXX **Lab ID: 30239093006** Collected: 12/18/17 14:08 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/26/17 23:49	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/26/17 23:49	75-01-4	
Xylene (Total)	**813**	ug/L	15.0	3.8	5		12/26/17 23:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	79-129		5		12/26/17 23:49	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	80-120		5		12/26/17 23:49	17060-07-0	
Toluene-d8 (S)	99	%	80-120		5		12/26/17 23:49	2037-26-5	
Dibromofluoromethane (S)	99	%	80-120		5		12/26/17 23:49	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO102-PZMXXX **Lab ID: 30239093007** Collected: 12/18/17 14:46 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**50.0 U**	ug/L	50.0	14.6	5		12/27/17 00:39	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/27/17 00:39	107-13-1	
Benzene	**22300**	ug/L	100	17.8	100		12/27/17 01:05	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/27/17 00:39	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/27/17 00:39	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/27/17 00:39	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/27/17 00:39	74-83-9	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	1.6	5		12/27/17 00:39	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/27/17 00:39	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/27/17 00:39	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/27/17 00:39	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/27/17 00:39	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/27/17 00:39	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/27/17 00:39	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/27/17 00:39	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/27/17 00:39	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/27/17 00:39	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/27/17 00:39	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/27/17 00:39	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/27/17 00:39	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/27/17 00:39	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/27/17 00:39	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/27/17 00:39	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/27/17 00:39	75-35-4	
cis-1,2-Dichloroethene	**3.3J**	ug/L	5.0	0.94	5		12/27/17 00:39	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/27/17 00:39	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/27/17 00:39	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/27/17 00:39	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/27/17 00:39	10061-02-6	
Ethylbenzene	**24.0**	ug/L	5.0	0.98	5		12/27/17 00:39	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/27/17 00:39	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/27/17 00:39	74-88-4	CH
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/27/17 00:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/27/17 00:39	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/27/17 00:39	1634-04-4	
Naphthalene	**970**	ug/L	10.0	0.56	5		12/27/17 00:39	91-20-3	
Styrene	**8.3**	ug/L	5.0	0.81	5		12/27/17 00:39	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/27/17 00:39	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/27/17 00:39	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/27/17 00:39	127-18-4	
Toluene	**1470**	ug/L	5.0	0.55	5		12/27/17 00:39	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/27/17 00:39	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/27/17 00:39	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/27/17 00:39	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/27/17 00:39	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/27/17 00:39	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: CO102-PZMXXX **Lab ID: 30239093007** Collected: 12/18/17 14:46 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/27/17 00:39	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/27/17 00:39	75-01-4	
Xylene (Total)	**292**	ug/L	15.0	3.8	5		12/27/17 00:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	79-129		5		12/27/17 00:39	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		5		12/27/17 00:39	17060-07-0	
Toluene-d8 (S)	101	%	80-120		5		12/27/17 00:39	2037-26-5	
Dibromofluoromethane (S)	100	%	80-120		5		12/27/17 00:39	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: Trip Blank **Lab ID: 30239093008** Collected: 12/18/17 00:01 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	5.0	2.9	1		12/26/17 16:39	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 16:39	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 16:39	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 16:39	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 16:39	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 16:39	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/26/17 16:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		12/26/17 16:39	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 16:39	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 16:39	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 16:39	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 16:39	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/26/17 16:39	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 16:39	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		12/26/17 16:39	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 16:39	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 16:39	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 16:39	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 16:39	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 16:39	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		12/26/17 16:39	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 16:39	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 16:39	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 16:39	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 16:39	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 16:39	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 16:39	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 16:39	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 16:39	10061-02-6	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		12/26/17 16:39	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.26	1		12/26/17 16:39	591-78-6	
Iodomethane	**3.1**	ug/L	1.0	4.6	1		12/26/17 16:39	74-88-4	CH
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 16:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		12/26/17 16:39	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 16:39	1634-04-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		12/26/17 16:39	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		12/26/17 16:39	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 16:39	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 16:39	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 16:39	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 16:39	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 16:39	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 16:39	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 16:39	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 16:39	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 16:39	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Sample: Trip Blank **Lab ID: 30239093008** Collected: 12/18/17 00:01 Received: 12/18/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		12/26/17 16:39	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 16:39	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.77	1		12/26/17 16:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	79-129		1		12/26/17 16:39	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		12/26/17 16:39	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		12/26/17 16:39	2037-26-5	
Dibromofluoromethane (S)	102	%	80-120		1		12/26/17 16:39	1868-53-7	

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QUALITY CONTROL DATA

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

QC Batch: 283434 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30239093001, 30239093002, 30239093003, 30239093004, 30239093005, 30239093006, 30239093007, 30239093008

METHOD BLANK: 1391624 | Matrix: Water
Associated Lab Samples: 30239093001, 30239093002, 30239093003, 30239093004, 30239093005, 30239093006, 30239093007, 30239093008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	12/26/17 15:48	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	12/26/17 15:48	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	12/26/17 15:48	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	12/26/17 15:48	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	12/26/17 15:48	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	12/26/17 15:48	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	12/26/17 15:48	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	12/26/17 15:48	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	12/26/17 15:48	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	12/26/17 15:48	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	12/26/17 15:48	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	12/26/17 15:48	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	12/26/17 15:48	
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	12/26/17 15:48	
2-Hexanone	ug/L	10.0 U	10.0	0.26	12/26/17 15:48	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	12/26/17 15:48	
Acetone	ug/L	10.0 U	10.0	2.9	12/26/17 15:48	
Acrylonitrile	ug/L	4.0 U	4.0	0.41	12/26/17 15:48	
Benzene	ug/L	1.0 U	1.0	0.18	12/26/17 15:48	
Bromochloromethane	ug/L	1.0 U	1.0	0.25	12/26/17 15:48	
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	12/26/17 15:48	
Bromoform	ug/L	1.0 U	1.0	0.14	12/26/17 15:48	
Bromomethane	ug/L	1.0 U	1.0	0.64	12/26/17 15:48	
Carbon disulfide	ug/L	1.0 U	1.0	0.22	12/26/17 15:48	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	12/26/17 15:48	
Chlorobenzene	ug/L	1.0 U	1.0	0.17	12/26/17 15:48	
Chloroethane	ug/L	1.0 U	1.0	0.55	12/26/17 15:48	
Chloroform	ug/L	1.0 U	1.0	0.24	12/26/17 15:48	
Chloromethane	ug/L	1.0 U	1.0	0.19	12/26/17 15:48	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	12/26/17 15:48	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	12/26/17 15:48	
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	12/26/17 15:48	
Dibromomethane	ug/L	1.0 U	1.0	0.37	12/26/17 15:48	
Ethylbenzene	ug/L	1.0 U	1.0	0.20	12/26/17 15:48	
Iodomethane	ug/L	50.0 U	50.0	4.6	12/26/17 15:48	CH
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	12/26/17 15:48	
Methylene Chloride	ug/L	1.0 U	1.0	0.43	12/26/17 15:48	
Naphthalene	ug/L	2.0 U	2.0	0.11	12/26/17 15:48	
Styrene	ug/L	1.0 U	1.0	0.16	12/26/17 15:48	
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	12/26/17 15:48	

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

METHOD BLANK: 1391624 Matrix: Water

Associated Lab Samples: 30239093001, 30239093002, 30239093003, 30239093004, 30239093005, 30239093006, 30239093007, 30239093008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.11	12/26/17 15:48	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	12/26/17 15:48	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	12/26/17 15:48	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	12/26/17 15:48	
Trichloroethene	ug/L	1.0 U	1.0	0.22	12/26/17 15:48	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	12/26/17 15:48	
Vinyl acetate	ug/L	10.0 U	10.0	0.15	12/26/17 15:48	
Vinyl chloride	ug/L	1.0 U	1.0	0.32	12/26/17 15:48	
Xylene (Total)	ug/L	3.0 U	3.0	0.77	12/26/17 15:48	
1,2-Dichloroethane-d4 (S)	%	103	80-120		12/26/17 15:48	
4-Bromofluorobenzene (S)	%	99	79-129		12/26/17 15:48	
Dibromofluoromethane (S)	%	102	80-120		12/26/17 15:48	
Toluene-d8 (S)	%	99	80-120		12/26/17 15:48	

LABORATORY CONTROL SAMPLE: 1391625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.8	99	70-130	
1,1,1-Trichloroethane	ug/L	20	18.5	92	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	18.6	93	65-127	
1,1,2-Trichloroethane	ug/L	20	18.8	94	70-130	
1,1-Dichloroethane	ug/L	20	19.3	97	70-130	
1,1-Dichloroethene	ug/L	20	20.3	101	70-130	
1,2,3-Trichloropropane	ug/L	20	17.9	89	70-130	
1,2-Dibromo-3-chloropropane	ug/L	20	15.6	78	58-128	
1,2-Dibromoethane (EDB)	ug/L	20	19.3	96	70-130	
1,2-Dichlorobenzene	ug/L	20	18.3	92	70-130	
1,2-Dichloroethane	ug/L	20	18.8	94	70-130	
1,2-Dichloropropane	ug/L	20	18.7	94	70-130	
1,4-Dichlorobenzene	ug/L	20	18.6	93	70-130	
2-Butanone (MEK)	ug/L	20	17.1	85	72-170	
2-Hexanone	ug/L	20	18.4	92	65-151	
4-Methyl-2-pentanone (MIBK)	ug/L	20	20.2	101	66-150	
Acetone	ug/L	20	12.4	62	30-179	
Acrylonitrile	ug/L	20	15.3	76	48-172	
Benzene	ug/L	20	18.3	91	70-130	
Bromochloromethane	ug/L	20	20.2	101	70-130	
Bromodichloromethane	ug/L	20	18.4	92	70-130	
Bromoform	ug/L	20	18.7	94	70-130	
Bromomethane	ug/L	20	16.5	83	47-174	
Carbon disulfide	ug/L	20	19.4	97	43-133	
Carbon tetrachloride	ug/L	20	19.4	97	56-143	
Chlorobenzene	ug/L	20	19.2	96	70-130	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

LABORATORY CONTROL SAMPLE: 1391625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	22.0	110	67-139	
Chloroform	ug/L	20	18.6	93	70-130	
Chloromethane	ug/L	20	20.4	102	57-138	
cis-1,2-Dichloroethene	ug/L	20	18.8	94	70-130	
cis-1,3-Dichloropropene	ug/L	20	19.1	96	70-130	
Dibromochloromethane	ug/L	20	19.9	99	70-130	
Dibromomethane	ug/L	20	18.9	95	70-130	
Ethylbenzene	ug/L	20	18.8	94	70-130	
Iodomethane	ug/L	20	27.1J	136	10-175	CH
Methyl-tert-butyl ether	ug/L	20	19.5	98	70-130	
Methylene Chloride	ug/L	20	18.5	92	55-144	
Naphthalene	ug/L	20	18.2	91	70-130	
Styrene	ug/L	20	18.9	94	70-130	
Tetrachloroethene	ug/L	20	19.4	97	70-130	
Toluene	ug/L	20	18.9	94	70-130	
trans-1,2-Dichloroethene	ug/L	20	18.9	95	70-130	
trans-1,3-Dichloropropene	ug/L	20	19.9	100	70-130	
trans-1,4-Dichloro-2-butene	ug/L	20	19.5	98	27-116	
Trichloroethene	ug/L	20	18.0	90	70-130	
Trichlorofluoromethane	ug/L	20	26.7	134	60-148	
Vinyl acetate	ug/L	20	20.9	105	30-181	
Vinyl chloride	ug/L	20	20.0	100	70-130	
Xylene (Total)	ug/L	60	56.5	94	70-130	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			100	79-129	
Dibromofluoromethane (S)	%			105	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1391905 1391906

Parameter	Units	30239093002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	20	20	18.3	18.2	91	91	51-124	1	30	
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	18.7	18.6	94	93	79-129	1	30	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	15.4	16.6	77	83	57-118	8	30	
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	17.1	17.9	86	90	68-117	5	30	
1,1-Dichloroethane	ug/L	1.0 U	20	20	18.2	17.9	91	90	74-119	1	30	
1,1-Dichloroethene	ug/L	1.0 U	20	20	18.9	18.7	94	93	63-126	1	30	
1,2,3-Trichloropropane	ug/L	1.0 U	20	20	17.0	16.9	85	84	56-129	1	30	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	20	20	13.9	14.4	69	72	53-120	4	30	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	20	20	17.4	17.1	87	86	69-124	2	30	
1,2-Dichlorobenzene	ug/L	1.0 U	20	20	16.8	16.9	84	84	72-119	0	30	
1,2-Dichloroethane	ug/L	1.0 U	20	20	17.7	18.1	88	91	69-116	2	30	
1,2-Dichloropropane	ug/L	1.0 U	20	20	16.9	16.9	85	85	63-118	0	30	

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(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1391905 1391906

Parameter	Units	30239093002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	1.0 U	20	20	16.2	17.4	81	87	72-118	7	30	
2-Butanone (MEK)	ug/L	10.0 U	20	20	19.4	21.1	97	106	72-168	8	30	
2-Hexanone	ug/L	10.0 U	20	20	18.0	18.5	90	93	66-143	3	30	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	20	20	20.8	21.7	104	109	67-145	4	30	
Acetone	ug/L	6.4J	20	20	24.7	21.8	91	77	15-175	12	30	
Acrylonitrile	ug/L	4.0 U	20	20	15.3	15.9	77	80	36-165	4	30	
Benzene	ug/L	1.0 U	20	20	16.6	17.1	83	86	67-121	3	30	
Bromochloromethane	ug/L	1.0 U	20	20	16.3	17.9	82	89	62-128	9	30	
Bromodichloromethane	ug/L	1.0 U	20	20	18.3	18.5	91	93	66-127	2	30	
Bromoform	ug/L	1.0 U	20	20	16.4	17.2	82	86	71-127	5	30	
Bromomethane	ug/L	0.95J	20	20	11.4	13.1	52	61	10-156	14	30	
Carbon disulfide	ug/L	1.0 U	20	20	16.5	17.1	83	86	45-131	4	30	
Carbon tetrachloride	ug/L	1.0 U	20	20	19.2	19.6	96	98	69-134	2	30	
Chlorobenzene	ug/L	1.0 U	20	20	17.6	17.5	88	88	69-119	0	30	
Chloroethane	ug/L	1.0 U	20	20	20.8	22.1	104	111	60-156	6	30	
Chloroform	ug/L	1.0 U	20	20	17.2	17.4	86	87	69-115	1	30	
Chloromethane	ug/L	3.3	20	20	28.6	29.2	126	129	52-145	2	30	
cis-1,2-Dichloroethene	ug/L	0.29J	20	20	17.8	18.0	88	89	65-120	1	30	
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	17.0	17.9	85	89	57-125	5	30	
Dibromochloromethane	ug/L	1.0 U	20	20	18.6	18.1	93	90	64-131	3	30	
Dibromomethane	ug/L	1.0 U	20	20	16.8	17.3	84	87	56-133	3	30	
Ethylbenzene	ug/L	1.0 U	20	20	17.2	17.7	86	88	70-127	3	30	
Iodomethane	ug/L	5.0J	20	20	20.6J	17.8J	78	64	10-152		30	CH
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	19.2	19.2	96	96	79-135	0	30	
Methylene Chloride	ug/L	1.0 U	20	20	17.5	16.7	87	84	54-133	4	30	
Naphthalene	ug/L	2.0 U	20	20	15.7	17.2	78	86	62-131	9	30	
Styrene	ug/L	1.0 U	20	20	17.0	17.0	85	85	65-121	0	30	
Tetrachloroethene	ug/L	1.0 U	20	20	18.5	18.8	92	94	77-125	2	30	
Toluene	ug/L	1.0 U	20	20	17.4	17.8	87	89	77-125	2	30	
trans-1,2-Dichloroethene	ug/L	1.0 U	20	20	17.1	17.7	85	88	70-119	3	30	
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	17.0	17.8	85	89	52-125	4	30	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	20	20	10.3	10.5	51	52	13-100	2	30	
Trichloroethene	ug/L	1.0 U	20	20	17.2	17.1	86	85	74-128	1	30	
Trichlorofluoromethane	ug/L	1.0 U	20	20	31.3	27.7	157	138	54-164	12	30	
Vinyl acetate	ug/L	10.0 U	20	20	12.7	12.7	63	63	15-173	0	30	
Vinyl chloride	ug/L	1.0 U	20	20	21.0	20.3	105	102	60-131	3	30	
Xylene (Total)	ug/L	3.0 U	60	60	52.5	54.8	87	91	69-128	4	30	
1,2-Dichloroethane-d4 (S)	%						109	106	80-120			
4-Bromofluorobenzene (S)	%						102	102	79-129			
Dibromofluoromethane (S)	%						101	104	80-120			
Toluene-d8 (S)	%						101	99	80-120			

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven 4th Q 2017
Pace Project No.: 30239093

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30239093001	**CO55-PZM000**	EPA 8260B	283434		
30239093002	**CO57-PZP002**	EPA 8260B	283434		
30239093003	**CO30-PZM015**	EPA 8260B	283434		
30239093004	**CO30-PZM060**	EPA 8260B	283434		
30239093005	**CO104-PZMXXX**	EPA 8260B	283434		
30239093006	**CO103-PZMXXX**	EPA 8260B	283434		
30239093007	**CO102-PZMXXX**	EPA 8260B	283434		
30239093008	**Trip Blank**	EPA 8260B	283434		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone:	314-620-3056
Fax:	
Requested Due Date/TAT:	5-day

Section B Required Project Information:

Report To:	James Calenda
Copy To:	Stew Kabis
PO Number:	
Project Name:	Coke oven 4th Q 2017
Project Number:	170384m-1-5

Section C Invoice Information:

Attention:	Laura Sargent
Company Name:	EnviroAnalytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MD

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW WT
WATER	WW
WASTE WATER	P
PRODUCT	SL
SOIL/SOLID	OL
OIL	WP
WIPE	AR
AIR	OT
OTHER	TS
TISSUE	

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

WO# : 30239093

30239093

ITEM #	SAMPLE ID	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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Vocs + Naphthalene 8260	Resi	Pace Project No./ Lab I.D.
1	C055-PZM000	WT	G			12-18-17	915		3				3						X		001
2	C057-PZP002	WT	G				1002		3				3						X		002
3	C030-PZM015	WT	G				1138		3				3						X		003
4	C030-PZM060	WT	G				1205		3				3						X		004
5	C0104-PZMXXX	WT	G				1305		3				3						X		005
6	C0103-PZMXXX	WT	G				1408		3				3						X		006
7	C0102-PZMXXX	WT	G				1446		3				3						X		007
8	Trip Blank	WT	G			12-18-17	—		2				2						X		008
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Data Package Required? (Y/N):	[signature]	12-18-17	1630	[signature] Pace	12/18/17	1705				
Data Validation Required? (Y/N):	[signature] Pace	12/18/17	1905	[signature]	12/18/17	1905				
If data package is required, attach data package checklist.	[signature]	12/18/17	2235	[signature] Pace	12-18-17	2235	0.9	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 12-18-17

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EnviroAna. Project # 30239093

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label ANL
LIMS Login BLM

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 6 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 0.9 °C Correction Factor: +0.0 °C Final Temp: 0.9 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AM 12-19-17

Comments:	Yes	No	N/A		
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.	
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	X			9.	
Correct Containers Used: -Pace Containers Used:	X X			10.	
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.	
Organic Samples checked for dechlorination:			X	14.	
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.			X X	16.	
exceptions (VOA) coliform, TOC, O&G, Phenolics				Initial when completed ANL / Lot # of added preservative	Date/time of preservation
Headspace in VOA Vials (>6mm):		X		17.	
Trip Blank Present: Trip Blank Custody Seals Present	X X			18.	
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed:	Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 28, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
1600 Sparrows Point Blvd
Suite B2
Sparrows Point, MD 21219

RE: Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Dear Mr. Calenda:

Enclosed are the analytical results for sample(s) received by the laboratory on December 15, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project:	Coke Oven 4th Q 2D 17
Pace Project No.:	30239046

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30239046001	**CO24-PZM007**	Water	12/15/17 09:47	12/15/17 23:55
30239046002	**Trip Blank**	Water	12/15/17 00:01	12/15/17 23:55
30239046003	**CO23-PZM008**	Water	12/15/17 10:19	12/15/17 23:55
30239046004	**CO59-PZM002**	Water	12/15/17 10:49	12/15/17 23:55
30239046005	**CO56-PZP001**	Water	12/15/17 11:50	12/15/17 23:55
30239046006	**CO26-PZM007**	Water	12/15/17 12:40	12/15/17 23:55
30239046007	**CO60-PZP001**	Water	12/15/17 13:30	12/15/17 23:55
30239046008	**CO58-PZM001**	Water	12/15/17 14:06	12/15/17 23:55

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SAMPLE ANALYTE COUNT

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30239046001	**CO24-PZM007**	EPA 8260B	MAK	53	PASI-PA
30239046002	**Trip Blank**	EPA 8260B	MAK	53	PASI-PA
30239046003	**CO23-PZM008**	EPA 8260B	MAK	53	PASI-PA
30239046004	**CO59-PZM002**	EPA 8260B	MAK	53	PASI-PA
30239046005	**CO56-PZP001**	EPA 8260B	MAK	53	PASI-PA
30239046006	**CO26-PZM007**	EPA 8260B	MAK	53	PASI-PA
30239046007	**CO60-PZP001**	EPA 8260B	MAK	53	PASI-PA
30239046008	**CO58-PZM001**	EPA 8260B	MAK	53	PASI-PA

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO24-PZM007 **Lab ID: 30239046001** Collected: 12/15/17 09:47 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**23.2**	ug/L	10.0	2.9	1		12/26/17 21:55	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 21:55	107-13-1	
Benzene	**4.4**	ug/L	1.0	0.18	1		12/26/17 21:55	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 21:55	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 21:55	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 21:55	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/26/17 21:55	74-83-9	
2-Butanone (MEK)	**3.5J**	ug/L	10.0	0.31	1		12/26/17 21:55	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 21:55	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 21:55	56-23-5	
Chlorobenzene	**0.27J**	ug/L	1.0	0.17	1		12/26/17 21:55	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 21:55	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/26/17 21:55	67-66-3	
Chloromethane	**0.84J**	ug/L	1.0	0.19	1		12/26/17 21:55	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/26/17 21:55	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 21:55	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 21:55	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 21:55	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 21:55	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 21:55	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/26/17 21:55	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 21:55	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 21:55	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 21:55	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 21:55	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 21:55	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 21:55	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 21:55	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 21:55	10061-02-6	
Ethylbenzene	**4.1**	ug/L	1.0	0.20	1		12/26/17 21:55	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/26/17 21:55	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/26/17 21:55	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 21:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/26/17 21:55	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 21:55	1634-04-4	
Naphthalene	**2360**	ug/L	100	5.6	50		12/26/17 22:20	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		12/26/17 21:55	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 21:55	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 21:55	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 21:55	127-18-4	
Toluene	**3.7**	ug/L	1.0	0.11	1		12/26/17 21:55	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 21:55	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 21:55	79-00-5	
Trichloroethene	**0.49J**	ug/L	1.0	0.22	1		12/26/17 21:55	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 21:55	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 21:55	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO24-PZM007 **Lab ID: 30239046001** Collected: 12/15/17 09:47 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/26/17 21:55	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 21:55	75-01-4	
Xylene (Total)	**8.5**	ug/L	3.0	0.77	1		12/26/17 21:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	79-129		1		12/26/17 21:55	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	80-120		1		12/26/17 21:55	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		12/26/17 21:55	2037-26-5	
Dibromofluoromethane (S)	113	%	80-120		1		12/26/17 21:55	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: Trip Blank **Lab ID: 30239046002** Collected: 12/15/17 00:01 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	5.0	2.9	1		12/26/17 16:26	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 16:26	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 16:26	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 16:26	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 16:26	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 16:26	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/26/17 16:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		12/26/17 16:26	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 16:26	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 16:26	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 16:26	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 16:26	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/26/17 16:26	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 16:26	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		12/26/17 16:26	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 16:26	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 16:26	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 16:26	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 16:26	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 16:26	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		12/26/17 16:26	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 16:26	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 16:26	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 16:26	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 16:26	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 16:26	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 16:26	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 16:26	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 16:26	10061-02-6	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		12/26/17 16:26	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.26	1		12/26/17 16:26	591-78-6	
Iodomethane	ND	ug/L	1.0	4.6	1		12/26/17 16:26	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 16:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		12/26/17 16:26	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 16:26	1634-04-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		12/26/17 16:26	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		12/26/17 16:26	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 16:26	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 16:26	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 16:26	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 16:26	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 16:26	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 16:26	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 16:26	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 16:26	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 16:26	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: Trip Blank **Lab ID: 30239046002** Collected: 12/15/17 00:01 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		12/26/17 16:26	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 16:26	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.77	1		12/26/17 16:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	79-129		1		12/26/17 16:26	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		12/26/17 16:26	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		12/26/17 16:26	2037-26-5	
Dibromofluoromethane (S)	104	%	80-120		1		12/26/17 16:26	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO23-PZM008 **Lab ID: 30239046003** Collected: 12/15/17 10:19 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**19.3J**	ug/L	50.0	14.6	5		12/26/17 23:36	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/26/17 23:36	107-13-1	
Benzene	**657**	ug/L	5.0	0.89	5		12/26/17 23:36	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/26/17 23:36	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/26/17 23:36	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/26/17 23:36	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/26/17 23:36	74-83-9	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	1.6	5		12/26/17 23:36	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 23:36	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/26/17 23:36	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/26/17 23:36	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/26/17 23:36	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/26/17 23:36	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/26/17 23:36	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/26/17 23:36	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/26/17 23:36	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/26/17 23:36	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/26/17 23:36	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/26/17 23:36	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 23:36	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/26/17 23:36	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/26/17 23:36	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/26/17 23:36	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 23:36	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/26/17 23:36	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/26/17 23:36	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/26/17 23:36	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/26/17 23:36	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/26/17 23:36	10061-02-6	
Ethylbenzene	**34.2**	ug/L	5.0	0.98	5		12/26/17 23:36	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/26/17 23:36	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/26/17 23:36	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/26/17 23:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/26/17 23:36	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/26/17 23:36	1634-04-4	
Naphthalene	**4300**	ug/L	200	11.1	100		12/27/17 00:02	91-20-3	
Styrene	**30.2**	ug/L	5.0	0.81	5		12/26/17 23:36	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/26/17 23:36	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/26/17 23:36	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/26/17 23:36	127-18-4	
Toluene	**374**	ug/L	5.0	0.55	5		12/26/17 23:36	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/26/17 23:36	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/26/17 23:36	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/26/17 23:36	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/26/17 23:36	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/26/17 23:36	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO23-PZM008 **Lab ID: 30239046003** Collected: 12/15/17 10:19 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/26/17 23:36	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/26/17 23:36	75-01-4	
Xylene (Total)	**543**	ug/L	15.0	3.8	5		12/26/17 23:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	79-129		5		12/26/17 23:36	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		5		12/26/17 23:36	17060-07-0	
Toluene-d8 (S)	98	%	80-120		5		12/26/17 23:36	2037-26-5	
Dibromofluoromethane (S)	99	%	80-120		5		12/26/17 23:36	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO59-PZM002 **Lab ID: 30239046004** Collected: 12/15/17 10:49 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**5.8J**	ug/L	10.0	2.9	1		12/26/17 18:07	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 18:07	107-13-1	
Benzene	**144**	ug/L	1.0	0.18	1		12/26/17 18:07	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 18:07	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 18:07	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:07	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/26/17 18:07	74-83-9	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	0.31	1		12/26/17 18:07	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 18:07	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 18:07	56-23-5	
Chlorobenzene	**0.43J**	ug/L	1.0	0.17	1		12/26/17 18:07	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 18:07	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/26/17 18:07	67-66-3	
Chloromethane	**1.0**	ug/L	1.0	0.19	1		12/26/17 18:07	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/26/17 18:07	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 18:07	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 18:07	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 18:07	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:07	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 18:07	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/26/17 18:07	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 18:07	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 18:07	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 18:07	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 18:07	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 18:07	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 18:07	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:07	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 18:07	10061-02-6	
Ethylbenzene	**7.4**	ug/L	1.0	0.20	1		12/26/17 18:07	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/26/17 18:07	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/26/17 18:07	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 18:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/26/17 18:07	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:07	1634-04-4	
Naphthalene	**492**	ug/L	10.0	0.56	5		12/27/17 12:10	91-20-3	
Styrene	**2.1**	ug/L	1.0	0.16	1		12/26/17 18:07	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 18:07	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:07	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 18:07	127-18-4	
Toluene	**64.7**	ug/L	1.0	0.11	1		12/26/17 18:07	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 18:07	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 18:07	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 18:07	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 18:07	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 18:07	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO59-PZM002 **Lab ID: 30239046004** Collected: 12/15/17 10:49 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/26/17 18:07	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 18:07	75-01-4	
Xylene (Total)	**116**	ug/L	3.0	0.77	1		12/26/17 18:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	79-129		1		12/26/17 18:07	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	80-120		1		12/26/17 18:07	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		12/26/17 18:07	2037-26-5	
Dibromofluoromethane (S)	99	%	80-120		1		12/26/17 18:07	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO56-PZP001 **Lab ID: 30239046005** Collected: 12/15/17 11:50 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**16.2J**	ug/L	50.0	14.6	5		12/27/17 00:27	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/27/17 00:27	107-13-1	
Benzene	**438**	ug/L	5.0	0.89	5		12/27/17 00:27	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/27/17 00:27	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/27/17 00:27	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/27/17 00:27	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/27/17 00:27	74-83-9	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	1.6	5		12/27/17 00:27	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/27/17 00:27	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/27/17 00:27	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/27/17 00:27	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/27/17 00:27	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/27/17 00:27	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/27/17 00:27	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/27/17 00:27	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/27/17 00:27	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/27/17 00:27	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/27/17 00:27	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/27/17 00:27	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/27/17 00:27	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/27/17 00:27	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/27/17 00:27	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/27/17 00:27	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/27/17 00:27	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/27/17 00:27	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/27/17 00:27	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/27/17 00:27	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/27/17 00:27	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/27/17 00:27	10061-02-6	
Ethylbenzene	**13.8**	ug/L	5.0	0.98	5		12/27/17 00:27	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/27/17 00:27	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/27/17 00:27	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/27/17 00:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/27/17 00:27	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/27/17 00:27	1634-04-4	
Naphthalene	**4130**	ug/L	200	11.1	100		12/27/17 00:52	91-20-3	
Styrene	**85.3**	ug/L	5.0	0.81	5		12/27/17 00:27	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/27/17 00:27	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/27/17 00:27	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/27/17 00:27	127-18-4	
Toluene	**140**	ug/L	5.0	0.55	5		12/27/17 00:27	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/27/17 00:27	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/27/17 00:27	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/27/17 00:27	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/27/17 00:27	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/27/17 00:27	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO56-PZP001 **Lab ID: 30239046005** Collected: 12/15/17 11:50 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/27/17 00:27	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/27/17 00:27	75-01-4	
Xylene (Total)	**289**	ug/L	15.0	3.8	5		12/27/17 00:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	79-129		5		12/27/17 00:27	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		5		12/27/17 00:27	17060-07-0	
Toluene-d8 (S)	96	%	80-120		5		12/27/17 00:27	2037-26-5	
Dibromofluoromethane (S)	103	%	80-120		5		12/27/17 00:27	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO26-PZM007 **Lab ID: 30239046006** Collected: 12/15/17 12:40 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**5.3J**	ug/L	10.0	2.9	1		12/26/17 22:46	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 22:46	107-13-1	
Benzene	**366**	ug/L	1.0	0.18	1		12/26/17 22:46	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 22:46	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 22:46	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 22:46	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/26/17 22:46	74-83-9	
2-Butanone (MEK)	**0.87J**	ug/L	10.0	0.31	1		12/26/17 22:46	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 22:46	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 22:46	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 22:46	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 22:46	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/26/17 22:46	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 22:46	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/26/17 22:46	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 22:46	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 22:46	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 22:46	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 22:46	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 22:46	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/26/17 22:46	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 22:46	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 22:46	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 22:46	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 22:46	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 22:46	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 22:46	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 22:46	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 22:46	10061-02-6	
Ethylbenzene	**13.1**	ug/L	1.0	0.20	1		12/26/17 22:46	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/26/17 22:46	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/26/17 22:46	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 22:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/26/17 22:46	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 22:46	1634-04-4	
Naphthalene	**3310**	ug/L	40.0	2.2	20		12/26/17 23:11	91-20-3	
Styrene	**77.5**	ug/L	1.0	0.16	1		12/26/17 22:46	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 22:46	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 22:46	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 22:46	127-18-4	
Toluene	**201**	ug/L	1.0	0.11	1		12/26/17 22:46	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 22:46	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 22:46	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 22:46	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 22:46	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 22:46	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO26-PZM007 **Lab ID: 30239046006** Collected: 12/15/17 12:40 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/26/17 22:46	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 22:46	75-01-4	
Xylene (Total)	**281**	ug/L	3.0	0.77	1		12/26/17 22:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%	79-129		1		12/26/17 22:46	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		12/26/17 22:46	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		12/26/17 22:46	2037-26-5	
Dibromofluoromethane (S)	106	%	80-120		1		12/26/17 22:46	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO60-PZP001 **Lab ID: 30239046007** Collected: 12/15/17 13:30 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**38.7**	ug/L	10.0	2.9	1		12/26/17 21:04	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 21:04	107-13-1	
Benzene	**310**	ug/L	1.0	0.18	1		12/26/17 21:04	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 21:04	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 21:04	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 21:04	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/26/17 21:04	74-83-9	
2-Butanone (MEK)	**3.8J**	ug/L	10.0	0.31	1		12/26/17 21:04	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 21:04	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 21:04	56-23-5	
Chlorobenzene	**0.61J**	ug/L	1.0	0.17	1		12/26/17 21:04	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 21:04	75-00-3	
Chloroform	**0.32J**	ug/L	1.0	0.24	1		12/26/17 21:04	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 21:04	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/26/17 21:04	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 21:04	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 21:04	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 21:04	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 21:04	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 21:04	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/26/17 21:04	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 21:04	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 21:04	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 21:04	75-35-4	
cis-1,2-Dichloroethene	**0.32J**	ug/L	1.0	0.19	1		12/26/17 21:04	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 21:04	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 21:04	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 21:04	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 21:04	10061-02-6	
Ethylbenzene	**8.7**	ug/L	1.0	0.20	1		12/26/17 21:04	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/26/17 21:04	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/26/17 21:04	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 21:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/26/17 21:04	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 21:04	1634-04-4	
Naphthalene	**2020**	ug/L	40.0	2.2	20		12/26/17 21:30	91-20-3	
Styrene	**45.6**	ug/L	1.0	0.16	1		12/26/17 21:04	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 21:04	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 21:04	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 21:04	127-18-4	
Toluene	**31.0**	ug/L	1.0	0.11	1		12/26/17 21:04	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 21:04	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 21:04	79-00-5	
Trichloroethene	**0.64J**	ug/L	1.0	0.22	1		12/26/17 21:04	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 21:04	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 21:04	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO60-PZP001 **Lab ID: 30239046007** Collected: 12/15/17 13:30 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/26/17 21:04	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 21:04	75-01-4	
Xylene (Total)	**176**	ug/L	3.0	0.77	1		12/26/17 21:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	79-129		1		12/26/17 21:04	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	80-120		1		12/26/17 21:04	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		12/26/17 21:04	2037-26-5	
Dibromofluoromethane (S)	103	%	80-120		1		12/26/17 21:04	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO58-PZM001 **Lab ID: 30239046008** Collected: 12/15/17 14:06 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**3.8J**	ug/L	10.0	2.9	1		12/26/17 18:32	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/26/17 18:32	107-13-1	
Benzene	**238**	ug/L	1.0	0.18	1		12/26/17 18:32	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 18:32	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 18:32	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:32	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/26/17 18:32	74-83-9	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	0.31	1		12/26/17 18:32	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 18:32	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 18:32	56-23-5	
Chlorobenzene	**0.55J**	ug/L	1.0	0.17	1		12/26/17 18:32	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/26/17 18:32	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/26/17 18:32	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 18:32	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/26/17 18:32	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 18:32	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/26/17 18:32	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/26/17 18:32	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:32	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/26/17 18:32	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/26/17 18:32	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/26/17 18:32	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/26/17 18:32	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/26/17 18:32	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/26/17 18:32	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 18:32	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/26/17 18:32	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:32	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/26/17 18:32	10061-02-6	
Ethylbenzene	**11.8**	ug/L	1.0	0.20	1		12/26/17 18:32	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/26/17 18:32	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/26/17 18:32	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/26/17 18:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/26/17 18:32	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:32	1634-04-4	
Naphthalene	**2310**	ug/L	40.0	2.2	20		12/26/17 18:58	91-20-3	
Styrene	**34.3**	ug/L	1.0	0.16	1		12/26/17 18:32	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/26/17 18:32	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/26/17 18:32	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/26/17 18:32	127-18-4	
Toluene	**93.9**	ug/L	1.0	0.11	1		12/26/17 18:32	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/26/17 18:32	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/26/17 18:32	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/26/17 18:32	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/26/17 18:32	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/26/17 18:32	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Sample: CO58-PZM001 **Lab ID: 30239046008** Collected: 12/15/17 14:06 Received: 12/15/17 23:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/26/17 18:32	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/26/17 18:32	75-01-4	
Xylene (Total)	**207**	ug/L	3.0	0.77	1		12/26/17 18:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-129		1		12/26/17 18:32	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		12/26/17 18:32	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		12/26/17 18:32	2037-26-5	
Dibromofluoromethane (S)	104	%	80-120		1		12/26/17 18:32	1868-53-7	

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QUALITY CONTROL DATA

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

QC Batch: 283435 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30239046001, 30239046002, 30239046003, 30239046004, 30239046005, 30239046006, 30239046007, 30239046008

METHOD BLANK: 1391626 | Matrix: Water
Associated Lab Samples: 30239046001, 30239046002, 30239046003, 30239046004, 30239046005, 30239046006, 30239046007, 30239046008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	12/26/17 15:36	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	12/26/17 15:36	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	12/26/17 15:36	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	12/26/17 15:36	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	12/26/17 15:36	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	12/26/17 15:36	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	12/26/17 15:36	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	12/26/17 15:36	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	12/26/17 15:36	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	12/26/17 15:36	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	12/26/17 15:36	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	12/26/17 15:36	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	12/26/17 15:36	
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	12/26/17 15:36	
2-Hexanone	ug/L	10.0 U	10.0	0.26	12/26/17 15:36	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	12/26/17 15:36	
Acetone	ug/L	10.0 U	10.0	2.9	12/26/17 15:36	
Acrylonitrile	ug/L	4.0 U	4.0	0.41	12/26/17 15:36	
Benzene	ug/L	1.0 U	1.0	0.18	12/26/17 15:36	
Bromochloromethane	ug/L	1.0 U	1.0	0.25	12/26/17 15:36	
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	12/26/17 15:36	
Bromoform	ug/L	1.0 U	1.0	0.14	12/26/17 15:36	
Bromomethane	ug/L	1.0 U	1.0	0.64	12/26/17 15:36	
Carbon disulfide	ug/L	1.0 U	1.0	0.22	12/26/17 15:36	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	12/26/17 15:36	
Chlorobenzene	ug/L	1.0 U	1.0	0.17	12/26/17 15:36	
Chloroethane	ug/L	1.0 U	1.0	0.55	12/26/17 15:36	
Chloroform	ug/L	1.0 U	1.0	0.24	12/26/17 15:36	
Chloromethane	ug/L	1.0 U	1.0	0.19	12/26/17 15:36	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	12/26/17 15:36	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	12/26/17 15:36	
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	12/26/17 15:36	
Dibromomethane	ug/L	1.0 U	1.0	0.37	12/26/17 15:36	
Ethylbenzene	ug/L	1.0 U	1.0	0.20	12/26/17 15:36	
Iodomethane	ug/L	50.0 U	50.0	4.6	12/26/17 15:36	
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	12/26/17 15:36	
Methylene Chloride	ug/L	1.0 U	1.0	0.43	12/26/17 15:36	
Naphthalene	ug/L	2.0 U	2.0	0.11	12/26/17 15:36	
Styrene	ug/L	1.0 U	1.0	0.16	12/26/17 15:36	
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	12/26/17 15:36	

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QUALITY CONTROL DATA

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

METHOD BLANK: 1391626 Matrix: Water

Associated Lab Samples: 30239046001, 30239046002, 30239046003, 30239046004, 30239046005, 30239046006, 30239046007, 30239046008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.11	12/26/17 15:36	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	12/26/17 15:36	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	12/26/17 15:36	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	12/26/17 15:36	
Trichloroethene	ug/L	1.0 U	1.0	0.22	12/26/17 15:36	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	12/26/17 15:36	
Vinyl acetate	ug/L	10.0 U	10.0	0.15	12/26/17 15:36	
Vinyl chloride	ug/L	1.0 U	1.0	0.32	12/26/17 15:36	
Xylene (Total)	ug/L	3.0 U	3.0	0.77	12/26/17 15:36	
1,2-Dichloroethane-d4 (S)	%	108	80-120		12/26/17 15:36	
4-Bromofluorobenzene (S)	%	101	79-129		12/26/17 15:36	
Dibromofluoromethane (S)	%	105	80-120		12/26/17 15:36	
Toluene-d8 (S)	%	97	80-120		12/26/17 15:36	

LABORATORY CONTROL SAMPLE: 1391627

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.4	97	70-130	
1,1,1-Trichloroethane	ug/L	20	20.5	102	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	18.7	93	65-127	
1,1,2-Trichloroethane	ug/L	20	18.4	92	70-130	
1,1-Dichloroethane	ug/L	20	20.5	103	70-130	
1,1-Dichloroethene	ug/L	20	21.3	107	70-130	
1,2,3-Trichloropropane	ug/L	20	18.8	94	70-130	
1,2-Dibromo-3-chloropropane	ug/L	20	20.3	102	58-128	
1,2-Dibromoethane (EDB)	ug/L	20	19.8	99	70-130	
1,2-Dichlorobenzene	ug/L	20	20.3	101	70-130	
1,2-Dichloroethane	ug/L	20	20.4	102	70-130	
1,2-Dichloropropane	ug/L	20	20.1	101	70-130	
1,4-Dichlorobenzene	ug/L	20	20.1	101	70-130	
2-Butanone (MEK)	ug/L	20	20.0	100	72-170	
2-Hexanone	ug/L	20	20.5	102	65-151	
4-Methyl-2-pentanone (MIBK)	ug/L	20	20.4	102	66-150	
Acetone	ug/L	20	20.5	102	30-179	
Acrylonitrile	ug/L	20	20.5	102	48-172	
Benzene	ug/L	20	19.6	98	70-130	
Bromochloromethane	ug/L	20	21.1	105	70-130	
Bromodichloromethane	ug/L	20	19.9	100	70-130	
Bromoform	ug/L	20	20.3	102	70-130	
Bromomethane	ug/L	20	16.7	84	47-174	
Carbon disulfide	ug/L	20	20.7	104	43-133	
Carbon tetrachloride	ug/L	20	21.7	108	56-143	
Chlorobenzene	ug/L	20	19.6	98	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

LABORATORY CONTROL SAMPLE: 1391627

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	22.2	111	67-139	
Chloroform	ug/L	20	19.6	98	70-130	
Chloromethane	ug/L	20	20.4	102	57-138	
cis-1,2-Dichloroethene	ug/L	20	20.2	101	70-130	
cis-1,3-Dichloropropene	ug/L	20	20.3	101	70-130	
Dibromochloromethane	ug/L	20	19.6	98	70-130	
Dibromomethane	ug/L	20	19.4	97	70-130	
Ethylbenzene	ug/L	20	20.3	101	70-130	
Iodomethane	ug/L	20	19.4J	97	10-175	
Methyl-tert-butyl ether	ug/L	20	20.4	102	70-130	
Methylene Chloride	ug/L	20	18.5	93	55-144	
Naphthalene	ug/L	20	20.8	104	70-130	
Styrene	ug/L	20	20.6	103	70-130	
Tetrachloroethene	ug/L	20	20.3	101	70-130	
Toluene	ug/L	20	19.0	95	70-130	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	70-130	
trans-1,3-Dichloropropene	ug/L	20	20.1	100	70-130	
trans-1,4-Dichloro-2-butene	ug/L	20	20.5	102	27-116	
Trichloroethene	ug/L	20	20.8	104	70-130	
Trichlorofluoromethane	ug/L	20	26.3	131	60-148	
Vinyl acetate	ug/L	20	21.6	108	30-181	
Vinyl chloride	ug/L	20	20.7	104	70-130	
Xylene (Total)	ug/L	60	59.9	100	70-130	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			100	79-129	
Dibromofluoromethane (S)	%			105	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1391907 1391908

Parameter	Units	30239012002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	20	20	19.6	19.7	98	99	51-124	0	30	
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	20.5	21.1	102	106	79-129	3	30	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	18.0	17.3	90	86	57-118	4	30	
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	18.5	18.3	92	91	68-117	1	30	
1,1-Dichloroethane	ug/L	1.0 U	20	20	19.9	20.6	99	103	74-119	4	30	
1,1-Dichloroethene	ug/L	1.0 U	20	20	20.3	21.0	102	105	63-126	3	30	
1,2,3-Trichloropropane	ug/L	1.0 U	20	20	19.0	17.4	95	87	56-129	9	30	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	20	20	18.5	18.2	93	91	53-120	2	30	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	20	20	19.1	19.2	95	96	69-124	1	30	
1,2-Dichlorobenzene	ug/L	6.8	20	20	25.8	25.5	95	93	72-119	1	30	
1,2-Dichloroethane	ug/L	1.0 U	20	20	19.7	20.1	99	100	69-116	2	30	
1,2-Dichloropropane	ug/L	1.0 U	20	20	18.4	18.6	92	93	63-118	1	30	

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QUALITY CONTROL DATA

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1391907 1391908

Parameter	Units	30239012002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	1.3	20	20	21.1	20.9	99	98	72-118	1	30	
2-Butanone (MEK)	ug/L	10.0 U	20	20	24.5	24.7	122	123	72-168	1	30	
2-Hexanone	ug/L	10.0 U	20	20	23.0	23.0	115	115	66-143	0	30	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	20	20	25.1	23.9	125	119	67-145	5	30	
Acetone	ug/L	8.5J	20	20	30.9	30.2	112	108	15-175	2	30	
Acrylonitrile	ug/L	4.0 U	20	20	19.4	19.5	97	98	36-165	1	30	
Benzene	ug/L	61.8	20	20	77.8	79.5	80	89	67-121	2	30	
Bromochloromethane	ug/L	1.0 U	20	20	20.0	20.1	100	101	62-128	1	30	
Bromodichloromethane	ug/L	1.0 U	20	20	20.8	21.0	104	105	66-127	1	30	
Bromoform	ug/L	1.0 U	20	20	18.3	17.5	92	88	71-127	5	30	
Bromomethane	ug/L	1.0 U	20	20	14.8	15.4	74	77	10-156	4	30	CL
Carbon disulfide	ug/L	0.27J	20	20	17.8	18.4	88	90	45-131	3	30	
Carbon tetrachloride	ug/L	1.0 U	20	20	22.6	22.3	113	111	69-134	1	30	
Chlorobenzene	ug/L	93.2	20	20	113	112	97	94	69-119	0	30	
Chloroethane	ug/L	1.0 U	20	20	22.9	24.3	114	121	60-156	6	30	
Chloroform	ug/L	1.0 U	20	20	18.8	19.6	94	98	69-115	4	30	
Chloromethane	ug/L	2.5	20	20	24.2	24.0	108	108	52-145	1	30	
cis-1,2-Dichloroethene	ug/L	0.89J	20	20	20.2	21.3	96	102	65-120	6	30	
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	19.5	19.4	97	97	57-125	0	30	
Dibromochloromethane	ug/L	1.0 U	20	20	19.3	19.7	96	99	64-131	2	30	
Dibromomethane	ug/L	1.0 U	20	20	17.5	18.4	87	92	56-133	5	30	
Ethylbenzene	ug/L	75.1	20	20	95.4	95.0	101	100	70-127	0	30	
Iodomethane	ug/L	50.0 U	20	20	15.0J	16.0J	64	69	10-152		30	CL
Methyl-tert-butyl ether	ug/L	1.0 U	20	20	21.4	21.2	107	106	79-135	1	30	
Methylene Chloride	ug/L	1.0 U	20	20	17.4	18.2	87	91	54-133	5	30	
Naphthalene	ug/L	2.0 U	20	20	21.7	20.6	108	103	62-131	5	30	
Styrene	ug/L	1.0 U	20	20	19.5	19.9	98	100	65-121	2	30	
Tetrachloroethene	ug/L	1.0 U	20	20	20.9	20.2	105	101	77-125	4	30	
Toluene	ug/L	10.3	20	20	30.6	29.7	101	97	77-125	3	30	
trans-1,2-Dichloroethene	ug/L	1.0 U	20	20	19.8	20.1	99	100	70-119	1	30	
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	17.9	18.6	90	93	52-125	4	30	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	20	20	12.5	11.7	62	58	13-100	7	30	
Trichloroethene	ug/L	0.29J	20	20	20.5	20.7	101	102	74-128	1	30	
Trichlorofluoromethane	ug/L	1.0 U	20	20	31.5	32.7	158	164	54-164	4	30	
Vinyl acetate	ug/L	10.0 U	20	20	13.8	14.5	69	72	15-173	5	30	
Vinyl chloride	ug/L	9.9	20	20	31.5	31.3	108	107	60-131	1	30	
Xylene (Total)	ug/L	25.7	60	60	86.0	86.0	101	101	69-128	0	30	
1,2-Dichloroethane-d4 (S)	%						108	107	80-120			
4-Bromofluorobenzene (S)	%						103	97	79-129			
Dibromofluoromethane (S)	%						104	106	80-120			
Toluene-d8 (S)	%						100	99	80-120			

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QUALIFIERS

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven 4th Q 2D 17
Pace Project No.: 30239046

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30239046001	**CO24-PZM007**	EPA 8260B	283435		
30239046002	**Trip Blank**	EPA 8260B	283435		
30239046003	**CO23-PZM008**	EPA 8260B	283435		
30239046004	**CO59-PZM002**	EPA 8260B	283435		
30239046005	**CO56-PZP001**	EPA 8260B	283435		
30239046006	**CO26-PZM007**	EPA 8260B	283435		
30239046007	**CO60-PZP001**	EPA 8260B	283435		
30239046008	**CO58-PZM001**	EPA 8260B	283435		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

~~30238963~~ BM 12-18-17

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	EnviroAnalytics Group	Report To:	James Calenda	Attention:	Laura Sargent
Address:	1430 Sparrows Point Blvd	Copy To:	Drew Kabis	Company Name:	EnviroAnalytics Group
	Sparrows Point, MD 21219			Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Email To:	jcalenda@enviroanalyticsgroup.com	PO Number:		Pace Quote Reference:	
Phone:	314-620-3056 Fax:	Project Name:	Coke Oven 4th Q 2017	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5-day	Project Number:	170384M-1-5	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW WT
WATER	WW
WASTE WATER	P
PRODUCT	SL
SOIL/SOLID	OL
OIL	WP
WIPE	AR
AIR	OT
OTHER	TS
TISSUE	

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

WO#: 30239046

30239046

ITEM #	SAMPLE ID	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)	Re	Pace Project No./ Lab I.D.
1	C024-PZM007	WT	G			12-15-17	997		3				3					X		001
2	Trip Blank	WT	G				—		2				2					X		002
3	C023-PZM008	WT	G				1019		3				3					X		003
4	C059-PZM002	WT	G				1049		3				3					X		004
5	~~C055-PZM000~~	~~WT~~	~~G~~				~~1117~~		~~3~~				~~3~~					~~X~~		
6	C056-PZP001	WT	G				1150		3				3					X		005
7	C026-PZM007	WT	G				1240		3				3					X		006
8	C060-PZP001	WT	G				1330		3				3					X		007
9	C058-PZM001	WT	G				1406		3				3					X		008
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Data Package Required? (Y/N):	[signature]	12-15-17	1520	[signature] Pace	12/15/17	1805				
Data Validation Required? (Y/N):	[signature] Pace	12/15/17	1835	[signature]	12/15/17	1835				
If data package is required, attach data package checklist.	[signature]	12/15/17	2355	Alyna K Mudsney Pace	12/15/17	2355	3.1	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12-15-17

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Sparrows

Project # ~~30239063~~ 30239046 BM 12-18-17

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label BLM
LIMS Login ~~AKA~~ BLM BM 12-18-17

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used X Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.1 °C Correction Factor: +0.0 °C Final Temp: 3.1 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AKA 12/18/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:	✓			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:	✓			8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.			✓ ✓	16.
exceptions: (VOA), coliform, TOC, O&G, Phenolics				Initial when completed AKA / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present: / Trip Blank Custody Seals Present	✓ ✓			18.
Rad Aqueous Samples Screened > 0.5 mrem/hr			✓	Initial when completed: / Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

December 21, 2017

Mr. James Calenda
EnviroAnalytics Group, LLC
1600 Sparrows Point Blvd
Suite B2
Sparrows Point, MD 21219

RE: Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Dear Mr. Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on December 14, 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,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30238793001	**Trip Blank**	Water	12/14/17 00:01	12/14/17 22:35
30238793002	**CO42-PZM004**	Water	12/14/17 11:22	12/14/17 22:35
30238793003	**CO40-PZM008**	Water	12/14/17 11:50	12/14/17 22:35
30238793004	**CO39-PZM042**	Water	12/14/17 12:58	12/14/17 22:35
30238793005	**CO39-PZM007**	Water	12/14/17 12:33	12/14/17 22:35
30238793006	**CO27-PZM046**	Water	12/14/17 13:25	12/14/17 22:35
30238793007	**CO27-PZM012**	Water	12/14/17 13:51	12/14/17 22:35
30238793008	**CO41-PZM001**	Water	12/14/17 14:34	12/14/17 22:35
30238793009	**CO41-PZM036**	Water	12/14/17 15:01	12/14/17 22:35

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SAMPLE ANALYTE COUNT

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30238793001	**Trip Blank**	EPA 8260B	MAK	53	PASI-PA
30238793002	**CO42-PZM004**	EPA 8260B	MAK	53	PASI-PA
30238793003	**CO40-PZM008**	EPA 8260B	MAK	53	PASI-PA
30238793004	**CO39-PZM042**	EPA 8260B	MAK	53	PASI-PA
30238793005	**CO39-PZM007**	EPA 8260B	MAK	53	PASI-PA
30238793006	**CO27-PZM046**	EPA 8260B	MAK	53	PASI-PA
30238793007	**CO27-PZM012**	EPA 8260B	MAK	53	PASI-PA
30238793008	**CO41-PZM001**	EPA 8260B	MAK	53	PASI-PA
30238793009	**CO41-PZM036**	EPA 8260B	MAK	53	PASI-PA

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: Trip Blank **Lab ID: 30238793001** Collected: 12/14/17 00:01 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	ND	ug/L	5.0	2.9	1		12/18/17 17:35	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/18/17 17:35	107-13-1	
Benzene	**1.0 U**	ug/L	1.0	0.18	1		12/18/17 17:35	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 17:35	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 17:35	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 17:35	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/18/17 17:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.31	1		12/18/17 17:35	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/18/17 17:35	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 17:35	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 17:35	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/18/17 17:35	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/18/17 17:35	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 17:35	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.33	1		12/18/17 17:35	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 17:35	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 17:35	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/18/17 17:35	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 17:35	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/18/17 17:35	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.41	1		12/18/17 17:35	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/18/17 17:35	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/18/17 17:35	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/18/17 17:35	75-35-4	
cis-1,2-Dichloroethene	**0.39J**	ug/L	1.0	0.19	1		12/18/17 17:35	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 17:35	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 17:35	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 17:35	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 17:35	10061-02-6	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.20	1		12/18/17 17:35	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.26	1		12/18/17 17:35	591-78-6	
Iodomethane	ND	ug/L	1.0	4.6	1		12/18/17 17:35	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/18/17 17:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.16	1		12/18/17 17:35	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 17:35	1634-04-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.11	1		12/18/17 17:35	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		12/18/17 17:35	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/18/17 17:35	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 17:35	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/18/17 17:35	127-18-4	
Toluene	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 17:35	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 17:35	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/18/17 17:35	79-00-5	
Trichloroethene	**0.37J**	ug/L	1.0	0.22	1		12/18/17 17:35	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/18/17 17:35	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/18/17 17:35	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: Trip Blank **Lab ID: 30238793001** Collected: 12/14/17 00:01 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	ND	ug/L	2.0	0.15	1		12/18/17 17:35	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/18/17 17:35	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.77	1		12/18/17 17:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		1		12/18/17 17:35	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		12/18/17 17:35	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		12/18/17 17:35	2037-26-5	
Dibromofluoromethane (S)	99	%	80-120		1		12/18/17 17:35	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO42-PZM004 **Lab ID: 30238793002** Collected: 12/14/17 11:22 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**10.0 U**	ug/L	10.0	2.9	1		12/18/17 18:26	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/18/17 18:26	107-13-1	
Benzene	**215**	ug/L	1.0	0.18	1		12/18/17 18:26	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 18:26	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:26	75-27-4	
Bromoform	**0.21J**	ug/L	1.0	0.14	1		12/18/17 18:26	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/18/17 18:26	74-83-9	
2-Butanone (MEK)	**1.0J**	ug/L	10.0	0.31	1		12/18/17 18:26	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/18/17 18:26	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:26	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:26	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/18/17 18:26	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/18/17 18:26	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 18:26	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/18/17 18:26	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 18:26	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 18:26	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/18/17 18:26	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:26	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/18/17 18:26	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/18/17 18:26	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/18/17 18:26	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/18/17 18:26	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/18/17 18:26	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 18:26	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 18:26	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 18:26	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:26	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:26	10061-02-6	
Ethylbenzene	**23.2**	ug/L	1.0	0.20	1		12/18/17 18:26	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/18/17 18:26	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/18/17 18:26	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/18/17 18:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/18/17 18:26	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:26	1634-04-4	
Naphthalene	**93.8**	ug/L	2.0	0.11	1		12/18/17 18:26	91-20-3	
Styrene	**21.6**	ug/L	1.0	0.16	1		12/18/17 18:26	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/18/17 18:26	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:26	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/18/17 18:26	127-18-4	
Toluene	**398**	ug/L	1.0	0.11	1		12/18/17 18:26	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 18:26	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/18/17 18:26	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/18/17 18:26	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/18/17 18:26	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/18/17 18:26	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO42-PZM004 **Lab ID: 30238793002** Collected: 12/14/17 11:22 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/18/17 18:26	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/18/17 18:26	75-01-4	
Xylene (Total)	**356**	ug/L	3.0	0.77	1		12/18/17 18:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		1		12/18/17 18:26	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		12/18/17 18:26	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		12/18/17 18:26	2037-26-5	
Dibromofluoromethane (S)	98	%	80-120		1		12/18/17 18:26	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO40-PZM008 **Lab ID: 30238793003** Collected: 12/14/17 11:50 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**10.0 U**	ug/L	10.0	2.9	1		12/18/17 18:01	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/18/17 18:01	107-13-1	
Benzene	**58.2**	ug/L	1.0	0.18	1		12/18/17 18:01	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 18:01	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:01	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:01	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/18/17 18:01	74-83-9	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	0.31	1		12/18/17 18:01	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/18/17 18:01	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:01	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:01	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/18/17 18:01	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/18/17 18:01	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 18:01	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/18/17 18:01	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 18:01	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 18:01	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/18/17 18:01	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:01	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/18/17 18:01	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/18/17 18:01	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/18/17 18:01	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/18/17 18:01	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/18/17 18:01	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 18:01	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 18:01	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 18:01	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:01	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 18:01	10061-02-6	
Ethylbenzene	**0.68J**	ug/L	1.0	0.20	1		12/18/17 18:01	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/18/17 18:01	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/18/17 18:01	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/18/17 18:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/18/17 18:01	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:01	1634-04-4	
Naphthalene	**32.6**	ug/L	2.0	0.11	1		12/18/17 18:01	91-20-3	
Styrene	**1.0 U**	ug/L	1.0	0.16	1		12/18/17 18:01	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/18/17 18:01	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 18:01	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/18/17 18:01	127-18-4	
Toluene	**5.2**	ug/L	1.0	0.11	1		12/18/17 18:01	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 18:01	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/18/17 18:01	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/18/17 18:01	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/18/17 18:01	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/18/17 18:01	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO40-PZM008 **Lab ID: 30238793003** Collected: 12/14/17 11:50 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/18/17 18:01	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/18/17 18:01	75-01-4	
Xylene (Total)	**9.4**	ug/L	3.0	0.77	1		12/18/17 18:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		1		12/18/17 18:01	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		12/18/17 18:01	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		12/18/17 18:01	2037-26-5	
Dibromofluoromethane (S)	101	%	80-120		1		12/18/17 18:01	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO39-PZM042 **Lab ID: 30238793004** Collected: 12/14/17 12:58 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**42.5J**	ug/L	50.0	14.6	5		12/18/17 20:58	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/18/17 20:58	107-13-1	
Benzene	**14500**	ug/L	200	35.6	200		12/18/17 21:24	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/18/17 20:58	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 20:58	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/18/17 20:58	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/18/17 20:58	74-83-9	
2-Butanone (MEK)	**3.9J**	ug/L	50.0	1.6	5		12/18/17 20:58	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 20:58	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 20:58	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/18/17 20:58	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/18/17 20:58	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 20:58	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/18/17 20:58	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/18/17 20:58	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/18/17 20:58	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 20:58	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 20:58	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/18/17 20:58	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 20:58	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/18/17 20:58	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/18/17 20:58	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/18/17 20:58	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 20:58	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/18/17 20:58	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/18/17 20:58	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/18/17 20:58	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 20:58	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/18/17 20:58	10061-02-6	
Ethylbenzene	**140**	ug/L	5.0	0.98	5		12/18/17 20:58	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/18/17 20:58	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/18/17 20:58	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/18/17 20:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/18/17 20:58	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 20:58	1634-04-4	
Naphthalene	**1470**	ug/L	10.0	0.56	5		12/18/17 20:58	91-20-3	
Styrene	**203**	ug/L	5.0	0.81	5		12/18/17 20:58	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 20:58	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/18/17 20:58	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/18/17 20:58	127-18-4	
Toluene	**5720**	ug/L	200	22.0	200		12/18/17 21:24	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/18/17 20:58	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 20:58	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 20:58	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/18/17 20:58	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 20:58	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO39-PZM042 **Lab ID: 30238793004** Collected: 12/14/17 12:58 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/18/17 20:58	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/18/17 20:58	75-01-4	
Xylene (Total)	**1180**	ug/L	15.0	3.8	5		12/18/17 20:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-129		5		12/18/17 20:58	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		5		12/18/17 20:58	17060-07-0	
Toluene-d8 (S)	98	%	80-120		5		12/18/17 20:58	2037-26-5	
Dibromofluoromethane (S)	99	%	80-120		5		12/18/17 20:58	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO39-PZM007 **Lab ID: 30238793005** Collected: 12/14/17 12:33 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**10.0 U**	ug/L	10.0	2.9	1		12/18/17 19:17	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/18/17 19:17	107-13-1	
Benzene	**1970**	ug/L	20.0	3.6	20		12/18/17 19:42	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 19:17	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 19:17	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 19:17	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/18/17 19:17	74-83-9	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	0.31	1		12/18/17 19:17	78-93-3	
Carbon disulfide	**0.57J**	ug/L	1.0	0.22	1		12/18/17 19:17	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 19:17	56-23-5	
Chlorobenzene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 19:17	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/18/17 19:17	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/18/17 19:17	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 19:17	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/18/17 19:17	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 19:17	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 19:17	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/18/17 19:17	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 19:17	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/18/17 19:17	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/18/17 19:17	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/18/17 19:17	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/18/17 19:17	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/18/17 19:17	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 19:17	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 19:17	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 19:17	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 19:17	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 19:17	10061-02-6	
Ethylbenzene	**13.8**	ug/L	1.0	0.20	1		12/18/17 19:17	100-41-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.26	1		12/18/17 19:17	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/18/17 19:17	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/18/17 19:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/18/17 19:17	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 19:17	1634-04-4	
Naphthalene	**643**	ug/L	40.0	2.2	20		12/18/17 19:42	91-20-3	
Styrene	**12.4**	ug/L	1.0	0.16	1		12/18/17 19:17	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/18/17 19:17	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 19:17	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/18/17 19:17	127-18-4	
Toluene	**393**	ug/L	20.0	2.2	20		12/18/17 19:42	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 19:17	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/18/17 19:17	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/18/17 19:17	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/18/17 19:17	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/18/17 19:17	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO39-PZM007 **Lab ID: 30238793005** Collected: 12/14/17 12:33 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/18/17 19:17	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/18/17 19:17	75-01-4	
Xylene (Total)	**98.3**	ug/L	3.0	0.77	1		12/18/17 19:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		1		12/18/17 19:17	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		12/18/17 19:17	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		12/18/17 19:17	2037-26-5	
Dibromofluoromethane (S)	100	%	80-120		1		12/18/17 19:17	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO27-PZM046 **Lab ID: 30238793006** Collected: 12/14/17 13:25 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**69.1**	ug/L	50.0	14.6	5		12/18/17 21:49	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/18/17 21:49	107-13-1	
Benzene	**117000**	ug/L	2000	356	2000		12/18/17 22:14	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/18/17 21:49	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 21:49	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/18/17 21:49	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/18/17 21:49	74-83-9	
2-Butanone (MEK)	**9.0J**	ug/L	50.0	1.6	5		12/18/17 21:49	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 21:49	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 21:49	56-23-5	
Chlorobenzene	**1.3J**	ug/L	5.0	0.85	5		12/18/17 21:49	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/18/17 21:49	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 21:49	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/18/17 21:49	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/18/17 21:49	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/18/17 21:49	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 21:49	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 21:49	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/18/17 21:49	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 21:49	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/18/17 21:49	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/18/17 21:49	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/18/17 21:49	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 21:49	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/18/17 21:49	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/18/17 21:49	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/18/17 21:49	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 21:49	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/18/17 21:49	10061-02-6	
Ethylbenzene	**375**	ug/L	5.0	0.98	5		12/18/17 21:49	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/18/17 21:49	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/18/17 21:49	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/18/17 21:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/18/17 21:49	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 21:49	1634-04-4	
Naphthalene	**6970**	ug/L	4000	222	2000		12/18/17 22:14	91-20-3	
Styrene	**44.7**	ug/L	5.0	0.81	5		12/18/17 21:49	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 21:49	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/18/17 21:49	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/18/17 21:49	127-18-4	
Toluene	**16900**	ug/L	2000	220	2000		12/18/17 22:14	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/18/17 21:49	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 21:49	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 21:49	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/18/17 21:49	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 21:49	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO27-PZM046 **Lab ID: 30238793006** Collected: 12/14/17 13:25 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/18/17 21:49	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/18/17 21:49	75-01-4	
Xylene (Total)	**4330**	ug/L	15.0	3.8	5		12/18/17 21:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	79-129		5		12/18/17 21:49	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		5		12/18/17 21:49	17060-07-0	
Toluene-d8 (S)	98	%	80-120		5		12/18/17 21:49	2037-26-5	
Dibromofluoromethane (S)	99	%	80-120		5		12/18/17 21:49	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO27-PZM012 **Lab ID: 30238793007** Collected: 12/14/17 13:51 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**45.5J**	ug/L	50.0	14.6	5		12/18/17 22:40	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/18/17 22:40	107-13-1	
Benzene	**10900**	ug/L	100	17.8	100		12/18/17 23:05	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/18/17 22:40	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 22:40	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/18/17 22:40	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/18/17 22:40	74-83-9	
2-Butanone (MEK)	**3.5J**	ug/L	50.0	1.6	5		12/18/17 22:40	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 22:40	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 22:40	56-23-5	
Chlorobenzene	**5.0 U**	ug/L	5.0	0.85	5		12/18/17 22:40	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/18/17 22:40	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 22:40	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/18/17 22:40	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/18/17 22:40	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/18/17 22:40	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 22:40	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 22:40	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/18/17 22:40	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 22:40	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/18/17 22:40	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/18/17 22:40	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/18/17 22:40	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 22:40	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/18/17 22:40	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/18/17 22:40	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/18/17 22:40	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 22:40	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/18/17 22:40	10061-02-6	
Ethylbenzene	**120**	ug/L	5.0	0.98	5		12/18/17 22:40	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/18/17 22:40	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/18/17 22:40	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/18/17 22:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/18/17 22:40	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 22:40	1634-04-4	
Naphthalene	**863**	ug/L	10.0	0.56	5		12/18/17 22:40	91-20-3	
Styrene	**136**	ug/L	5.0	0.81	5		12/18/17 22:40	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 22:40	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/18/17 22:40	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/18/17 22:40	127-18-4	
Toluene	**3900**	ug/L	100	11.0	100		12/18/17 23:05	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/18/17 22:40	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 22:40	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 22:40	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/18/17 22:40	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 22:40	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO27-PZM012 **Lab ID: 30238793007** Collected: 12/14/17 13:51 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/18/17 22:40	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/18/17 22:40	75-01-4	
Xylene (Total)	**1060**	ug/L	15.0	3.8	5		12/18/17 22:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	79-129		5		12/18/17 22:40	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		5		12/18/17 22:40	17060-07-0	
Toluene-d8 (S)	100	%	80-120		5		12/18/17 22:40	2037-26-5	
Dibromofluoromethane (S)	97	%	80-120		5		12/18/17 22:40	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO41-PZM001 **Lab ID: 30238793008** Collected: 12/14/17 14:34 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**7.6J**	ug/L	10.0	2.9	1		12/18/17 20:07	67-64-1	
Acrylonitrile	**4.0 U**	ug/L	4.0	0.41	1		12/18/17 20:07	107-13-1	
Benzene	**17800**	ug/L	200	35.6	200		12/19/17 23:11	71-43-2	
Bromochloromethane	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 20:07	74-97-5	
Bromodichloromethane	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 20:07	75-27-4	
Bromoform	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 20:07	75-25-2	
Bromomethane	**1.0 U**	ug/L	1.0	0.64	1		12/18/17 20:07	74-83-9	
2-Butanone (MEK)	**9.9J**	ug/L	10.0	0.31	1		12/18/17 20:07	78-93-3	
Carbon disulfide	**1.0 U**	ug/L	1.0	0.22	1		12/18/17 20:07	75-15-0	
Carbon tetrachloride	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 20:07	56-23-5	
Chlorobenzene	**0.95J**	ug/L	1.0	0.17	1		12/18/17 20:07	108-90-7	
Chloroethane	**1.0 U**	ug/L	1.0	0.55	1		12/18/17 20:07	75-00-3	
Chloroform	**1.0 U**	ug/L	1.0	0.24	1		12/18/17 20:07	67-66-3	
Chloromethane	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 20:07	74-87-3	
1,2-Dibromo-3-chloropropane	**5.0 U**	ug/L	5.0	0.33	1		12/18/17 20:07	96-12-8	
Dibromochloromethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 20:07	124-48-1	
1,2-Dibromoethane (EDB)	**1.0 U**	ug/L	1.0	0.25	1		12/18/17 20:07	106-93-4	
Dibromomethane	**1.0 U**	ug/L	1.0	0.37	1		12/18/17 20:07	74-95-3	
1,2-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 20:07	95-50-1	
1,4-Dichlorobenzene	**1.0 U**	ug/L	1.0	0.21	1		12/18/17 20:07	106-46-7	
trans-1,4-Dichloro-2-butene	**5.0 U**	ug/L	5.0	0.41	1		12/18/17 20:07	110-57-6	
1,1-Dichloroethane	**1.0 U**	ug/L	1.0	0.13	1		12/18/17 20:07	75-34-3	
1,2-Dichloroethane	**1.0 U**	ug/L	1.0	0.18	1		12/18/17 20:07	107-06-2	
1,1-Dichloroethene	**1.0 U**	ug/L	1.0	0.23	1		12/18/17 20:07	75-35-4	
cis-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.19	1		12/18/17 20:07	156-59-2	
trans-1,2-Dichloroethene	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 20:07	156-60-5	
1,2-Dichloropropane	**1.0 U**	ug/L	1.0	0.11	1		12/18/17 20:07	78-87-5	
cis-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 20:07	10061-01-5	
trans-1,3-Dichloropropene	**1.0 U**	ug/L	1.0	0.17	1		12/18/17 20:07	10061-02-6	
Ethylbenzene	**392**	ug/L	20.0	3.9	20		12/18/17 20:33	100-41-4	
2-Hexanone	**0.73J**	ug/L	10.0	0.26	1		12/18/17 20:07	591-78-6	
Iodomethane	**50.0 U**	ug/L	50.0	4.6	1		12/18/17 20:07	74-88-4	
Methylene Chloride	**1.0 U**	ug/L	1.0	0.43	1		12/18/17 20:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.16	1		12/18/17 20:07	108-10-1	
Methyl-tert-butyl ether	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 20:07	1634-04-4	
Naphthalene	**271**	ug/L	2.0	0.11	1		12/18/17 20:07	91-20-3	
Styrene	**3.8**	ug/L	1.0	0.16	1		12/18/17 20:07	100-42-5	
1,1,1,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.27	1		12/18/17 20:07	630-20-6	
1,1,2,2-Tetrachloroethane	**1.0 U**	ug/L	1.0	0.14	1		12/18/17 20:07	79-34-5	
Tetrachloroethene	**1.0 U**	ug/L	1.0	0.39	1		12/18/17 20:07	127-18-4	
Toluene	**11900**	ug/L	200	22.0	200		12/19/17 23:11	108-88-3	
1,1,1-Trichloroethane	**1.0 U**	ug/L	1.0	0.10	1		12/18/17 20:07	71-55-6	
1,1,2-Trichloroethane	**1.0 U**	ug/L	1.0	0.29	1		12/18/17 20:07	79-00-5	
Trichloroethene	**1.0 U**	ug/L	1.0	0.22	1		12/18/17 20:07	79-01-6	
Trichlorofluoromethane	**1.0 U**	ug/L	1.0	0.12	1		12/18/17 20:07	75-69-4	
1,2,3-Trichloropropane	**1.0 U**	ug/L	1.0	0.35	1		12/18/17 20:07	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO41-PZM001 **Lab ID: 30238793008** Collected: 12/14/17 14:34 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**10.0 U**	ug/L	10.0	0.15	1		12/18/17 20:07	108-05-4	
Vinyl chloride	**1.0 U**	ug/L	1.0	0.32	1		12/18/17 20:07	75-01-4	
Xylene (Total)	**4010**	ug/L	60.0	15.4	20		12/18/17 20:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	79-129		1		12/18/17 20:07	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		12/18/17 20:07	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		12/18/17 20:07	2037-26-5	
Dibromofluoromethane (S)	97	%	80-120		1		12/18/17 20:07	1868-53-7	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO41-PZM036 **Lab ID: 30238793009** Collected: 12/14/17 15:01 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Acetone	**37.1J**	ug/L	50.0	14.6	5		12/18/17 23:30	67-64-1	
Acrylonitrile	**20.0 U**	ug/L	20.0	2.0	5		12/18/17 23:30	107-13-1	
Benzene	**139000**	ug/L	500	89.0	500		12/18/17 23:56	71-43-2	
Bromochloromethane	**5.0 U**	ug/L	5.0	1.3	5		12/18/17 23:30	74-97-5	
Bromodichloromethane	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 23:30	75-27-4	
Bromoform	**5.0 U**	ug/L	5.0	0.72	5		12/18/17 23:30	75-25-2	
Bromomethane	**5.0 U**	ug/L	5.0	3.2	5		12/18/17 23:30	74-83-9	
2-Butanone (MEK)	**50.0 U**	ug/L	50.0	1.6	5		12/18/17 23:30	78-93-3	
Carbon disulfide	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 23:30	75-15-0	
Carbon tetrachloride	**5.0 U**	ug/L	5.0	0.86	5		12/18/17 23:30	56-23-5	
Chlorobenzene	**2.0J**	ug/L	5.0	0.85	5		12/18/17 23:30	108-90-7	
Chloroethane	**5.0 U**	ug/L	5.0	2.8	5		12/18/17 23:30	75-00-3	
Chloroform	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 23:30	67-66-3	
Chloromethane	**5.0 U**	ug/L	5.0	0.97	5		12/18/17 23:30	74-87-3	
1,2-Dibromo-3-chloropropane	**25.0 U**	ug/L	25.0	1.6	5		12/18/17 23:30	96-12-8	
Dibromochloromethane	**5.0 U**	ug/L	5.0	0.52	5		12/18/17 23:30	124-48-1	
1,2-Dibromoethane (EDB)	**5.0 U**	ug/L	5.0	1.2	5		12/18/17 23:30	106-93-4	
Dibromomethane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 23:30	74-95-3	
1,2-Dichlorobenzene	**5.0 U**	ug/L	5.0	0.71	5		12/18/17 23:30	95-50-1	
1,4-Dichlorobenzene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 23:30	106-46-7	
trans-1,4-Dichloro-2-butene	**25.0 U**	ug/L	25.0	2.0	5		12/18/17 23:30	110-57-6	
1,1-Dichloroethane	**5.0 U**	ug/L	5.0	0.66	5		12/18/17 23:30	75-34-3	
1,2-Dichloroethane	**5.0 U**	ug/L	5.0	0.92	5		12/18/17 23:30	107-06-2	
1,1-Dichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 23:30	75-35-4	
cis-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.94	5		12/18/17 23:30	156-59-2	
trans-1,2-Dichloroethene	**5.0 U**	ug/L	5.0	0.53	5		12/18/17 23:30	156-60-5	
1,2-Dichloropropane	**5.0 U**	ug/L	5.0	0.56	5		12/18/17 23:30	78-87-5	
cis-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 23:30	10061-01-5	
trans-1,3-Dichloropropene	**5.0 U**	ug/L	5.0	0.84	5		12/18/17 23:30	10061-02-6	
Ethylbenzene	**621**	ug/L	5.0	0.98	5		12/18/17 23:30	100-41-4	
2-Hexanone	**50.0 U**	ug/L	50.0	1.3	5		12/18/17 23:30	591-78-6	
Iodomethane	**250 U**	ug/L	250	23.2	5		12/18/17 23:30	74-88-4	
Methylene Chloride	**5.0 U**	ug/L	5.0	2.1	5		12/18/17 23:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	**50.0 U**	ug/L	50.0	0.80	5		12/18/17 23:30	108-10-1	
Methyl-tert-butyl ether	**5.0 U**	ug/L	5.0	0.70	5		12/18/17 23:30	1634-04-4	
Naphthalene	**306**	ug/L	10.0	0.56	5		12/18/17 23:30	91-20-3	
Styrene	**287**	ug/L	5.0	0.81	5		12/18/17 23:30	100-42-5	
1,1,1,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 23:30	630-20-6	
1,1,2,2-Tetrachloroethane	**5.0 U**	ug/L	5.0	0.69	5		12/18/17 23:30	79-34-5	
Tetrachloroethene	**5.0 U**	ug/L	5.0	1.9	5		12/18/17 23:30	127-18-4	
Toluene	**42500**	ug/L	500	55.0	500		12/18/17 23:56	108-88-3	
1,1,1-Trichloroethane	**5.0 U**	ug/L	5.0	0.51	5		12/18/17 23:30	71-55-6	
1,1,2-Trichloroethane	**5.0 U**	ug/L	5.0	1.4	5		12/18/17 23:30	79-00-5	
Trichloroethene	**5.0 U**	ug/L	5.0	1.1	5		12/18/17 23:30	79-01-6	
Trichlorofluoromethane	**5.0 U**	ug/L	5.0	0.62	5		12/18/17 23:30	75-69-4	
1,2,3-Trichloropropane	**5.0 U**	ug/L	5.0	1.8	5		12/18/17 23:30	96-18-4	

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ANALYTICAL RESULTS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Sample: CO41-PZM036 **Lab ID: 30238793009** Collected: 12/14/17 15:01 Received: 12/14/17 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Vinyl acetate	**50.0 U**	ug/L	50.0	0.74	5		12/18/17 23:30	108-05-4	
Vinyl chloride	**5.0 U**	ug/L	5.0	1.6	5		12/18/17 23:30	75-01-4	
Xylene (Total)	**12600**	ug/L	1500	384	500		12/18/17 23:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	79-129		5		12/18/17 23:30	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		5		12/18/17 23:30	17060-07-0	
Toluene-d8 (S)	99	%	80-120		5		12/18/17 23:30	2037-26-5	
Dibromofluoromethane (S)	98	%	80-120		5		12/18/17 23:30	1868-53-7	

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QUALITY CONTROL DATA

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

QC Batch: 282678 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Associated Lab Samples: 30238793001, 30238793002, 30238793003, 30238793004, 30238793005, 30238793006, 30238793007, 30238793008, 30238793009

METHOD BLANK: 1387953 | Matrix: Water
Associated Lab Samples: 30238793001, 30238793002, 30238793003, 30238793004, 30238793005, 30238793006, 30238793007, 30238793008, 30238793009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.27	12/18/17 15:28	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0	0.10	12/18/17 15:28	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0	0.14	12/18/17 15:28	
1,1,2-Trichloroethane	ug/L	1.0 U	1.0	0.29	12/18/17 15:28	
1,1-Dichloroethane	ug/L	1.0 U	1.0	0.13	12/18/17 15:28	
1,1-Dichloroethene	ug/L	1.0 U	1.0	0.23	12/18/17 15:28	
1,2,3-Trichloropropane	ug/L	1.0 U	1.0	0.35	12/18/17 15:28	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	5.0	0.33	12/18/17 15:28	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	1.0	0.25	12/18/17 15:28	
1,2-Dichlorobenzene	ug/L	1.0 U	1.0	0.14	12/18/17 15:28	
1,2-Dichloroethane	ug/L	1.0 U	1.0	0.18	12/18/17 15:28	
1,2-Dichloropropane	ug/L	1.0 U	1.0	0.11	12/18/17 15:28	
1,4-Dichlorobenzene	ug/L	1.0 U	1.0	0.21	12/18/17 15:28	
2-Butanone (MEK)	ug/L	10.0 U	10.0	0.31	12/18/17 15:28	
2-Hexanone	ug/L	10.0 U	10.0	0.26	12/18/17 15:28	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.16	12/18/17 15:28	
Acetone	ug/L	10.0 U	10.0	2.9	12/18/17 15:28	
Acrylonitrile	ug/L	4.0 U	4.0	0.41	12/18/17 15:28	
Benzene	ug/L	1.0 U	1.0	0.18	12/18/17 15:28	
Bromochloromethane	ug/L	1.0 U	1.0	0.25	12/18/17 15:28	
Bromodichloromethane	ug/L	1.0 U	1.0	0.17	12/18/17 15:28	
Bromoform	ug/L	1.0 U	1.0	0.14	12/18/17 15:28	
Bromomethane	ug/L	1.0 U	1.0	0.64	12/18/17 15:28	
Carbon disulfide	ug/L	1.0 U	1.0	0.22	12/18/17 15:28	
Carbon tetrachloride	ug/L	1.0 U	1.0	0.17	12/18/17 15:28	
Chlorobenzene	ug/L	1.0 U	1.0	0.17	12/18/17 15:28	
Chloroethane	ug/L	1.0 U	1.0	0.55	12/18/17 15:28	
Chloroform	ug/L	1.0 U	1.0	0.24	12/18/17 15:28	
Chloromethane	ug/L	1.0 U	1.0	0.19	12/18/17 15:28	
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.19	12/18/17 15:28	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.14	12/18/17 15:28	
Dibromochloromethane	ug/L	1.0 U	1.0	0.10	12/18/17 15:28	
Dibromomethane	ug/L	1.0 U	1.0	0.37	12/18/17 15:28	
Ethylbenzene	ug/L	1.0 U	1.0	0.20	12/18/17 15:28	
Iodomethane	ug/L	50.0 U	50.0	4.6	12/18/17 15:28	
Methyl-tert-butyl ether	ug/L	1.0 U	1.0	0.14	12/18/17 15:28	
Methylene Chloride	ug/L	1.0 U	1.0	0.43	12/18/17 15:28	
Naphthalene	ug/L	2.0 U	2.0	0.11	12/18/17 15:28	
Styrene	ug/L	1.0 U	1.0	0.16	12/18/17 15:28	
Tetrachloroethene	ug/L	1.0 U	1.0	0.39	12/18/17 15:28	

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.

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QUALITY CONTROL DATA

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

METHOD BLANK: 1387953 Matrix: Water

Associated Lab Samples: 30238793001, 30238793002, 30238793003, 30238793004, 30238793005, 30238793006, 30238793007, 30238793008, 30238793009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene	ug/L	1.0 U	1.0	0.11	12/18/17 15:28	
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0	0.11	12/18/17 15:28	
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0	0.17	12/18/17 15:28	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	5.0	0.41	12/18/17 15:28	
Trichloroethene	ug/L	1.0 U	1.0	0.22	12/18/17 15:28	
Trichlorofluoromethane	ug/L	1.0 U	1.0	0.12	12/18/17 15:28	
Vinyl acetate	ug/L	10.0 U	10.0	0.15	12/18/17 15:28	
Vinyl chloride	ug/L	1.0 U	1.0	0.32	12/18/17 15:28	
Xylene (Total)	ug/L	3.0 U	3.0	0.77	12/18/17 15:28	
1,2-Dichloroethane-d4 (S)	%	100	80-120		12/18/17 15:28	
4-Bromofluorobenzene (S)	%	101	79-129		12/18/17 15:28	
Dibromofluoromethane (S)	%	99	80-120		12/18/17 15:28	
Toluene-d8 (S)	%	99	80-120		12/18/17 15:28	

LABORATORY CONTROL SAMPLE: 1387954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.7	99	70-130	
1,1,1-Trichloroethane	ug/L	20	20.2	101	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	19.4	97	65-127	
1,1,2-Trichloroethane	ug/L	20	19.6	98	70-130	
1,1-Dichloroethane	ug/L	20	20.6	103	70-130	
1,1-Dichloroethene	ug/L	20	20.2	101	70-130	
1,2,3-Trichloropropane	ug/L	20	18.8	94	70-130	
1,2-Dibromo-3-chloropropane	ug/L	20	16.9	84	58-128	
1,2-Dibromoethane (EDB)	ug/L	20	19.2	96	70-130	
1,2-Dichlorobenzene	ug/L	20	19.1	96	70-130	
1,2-Dichloroethane	ug/L	20	19.3	97	70-130	
1,2-Dichloropropane	ug/L	20	19.9	99	70-130	
1,4-Dichlorobenzene	ug/L	20	18.7	94	70-130	
2-Butanone (MEK)	ug/L	20	18.8	94	72-170	
2-Hexanone	ug/L	20	18.3	92	65-151	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.8	99	66-150	
Acetone	ug/L	20	14.6	73	30-179	
Acrylonitrile	ug/L	20	17.6	88	48-172	
Benzene	ug/L	20	19.6	98	70-130	
Bromochloromethane	ug/L	20	19.6	98	70-130	
Bromodichloromethane	ug/L	20	19.2	96	70-130	
Bromoform	ug/L	20	19.2	96	70-130	
Bromomethane	ug/L	20	17.2	86	47-174	
Carbon disulfide	ug/L	20	20.4	102	43-133	
Carbon tetrachloride	ug/L	20	19.9	100	56-143	
Chlorobenzene	ug/L	20	19.7	98	70-130	

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

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

LABORATORY CONTROL SAMPLE: 1387954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	20	20.8	104	67-139	
Chloroform	ug/L	20	19.1	96	70-130	
Chloromethane	ug/L	20	15.0	75	57-138	
cis-1,2-Dichloroethene	ug/L	20	19.8	99	70-130	
cis-1,3-Dichloropropene	ug/L	20	19.9	100	70-130	
Dibromochloromethane	ug/L	20	19.7	98	70-130	
Dibromomethane	ug/L	20	19.2	96	70-130	
Ethylbenzene	ug/L	20	19.4	97	70-130	
Iodomethane	ug/L	20	17.0J	85	10-175	
Methyl-tert-butyl ether	ug/L	20	19.7	98	70-130	
Methylene Chloride	ug/L	20	19.1	95	55-144	
Naphthalene	ug/L	20	19.4	97	70-130	
Styrene	ug/L	20	19.5	98	70-130	
Tetrachloroethene	ug/L	20	20.3	102	70-130	
Toluene	ug/L	20	19.6	98	70-130	
trans-1,2-Dichloroethene	ug/L	20	20.1	101	70-130	
trans-1,3-Dichloropropene	ug/L	20	19.4	97	70-130	
trans-1,4-Dichloro-2-butene	ug/L	20	18.3	92	27-116	
Trichloroethene	ug/L	20	20.0	100	70-130	
Trichlorofluoromethane	ug/L	20	22.7	114	60-148	
Vinyl acetate	ug/L	20	19.1	96	30-181	
Vinyl chloride	ug/L	20	17.6	88	70-130	
Xylene (Total)	ug/L	60	58.2	97	70-130	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			103	79-129	
Dibromofluoromethane (S)	%			102	80-120	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1388217 1388218

Parameter	Units	30238749002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	1.0 U	20	20	17.9	17.2	89	86	51-124	4	30	
1,1,1-Trichloroethane	ug/L	1.0 U	20	20	18.2	17.8	91	89	79-129	2	30	
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	20	20	17.2	16.4	86	82	57-118	4	30	
1,1,2-Trichloroethane	ug/L	1.0 U	20	20	16.8	17.1	84	86	68-117	2	30	
1,1-Dichloroethane	ug/L	1.0 U	20	20	19.0	18.2	95	91	74-119	5	30	
1,1-Dichloroethene	ug/L	0.86J	20	20	19.8	19.7	95	94	63-126	1	30	
1,2,3-Trichloropropane	ug/L	1.0 U	20	20	18.1	16.9	90	84	56-129	7	30	
1,2-Dibromo-3-chloropropane	ug/L	5.0 U	20	20	16.5	16.0	82	80	53-120	3	30	
1,2-Dibromoethane (EDB)	ug/L	1.0 U	20	20	17.8	17.4	89	87	69-124	2	30	
1,2-Dichlorobenzene	ug/L	0.64J	20	20	18.6	18.4	90	89	72-119	1	30	
1,2-Dichloroethane	ug/L	1.0 U	20	20	17.6	17.6	88	88	69-116	0	30	
1,2-Dichloropropane	ug/L	1.2	20	20	18.4	18.2	86	85	63-118	1	30	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1388217 1388218

Parameter	Units	30238749002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	0.27J	20	20	18.2	18.2	90	89	72-118	0	30	
2-Butanone (MEK)	ug/L	10.0 U	20	20	24.1	24.0	121	120	72-168	1	30	
2-Hexanone	ug/L	10.0 U	20	20	21.0	20.2	105	101	66-143	4	30	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	20	20	23.2	22.5	116	112	67-145	3	30	
Acetone	ug/L	10.0 U	20	20	25.9	27.7	118	127	15-175	6	30	
Acrylonitrile	ug/L	4.0 U	20	20	19.3	19.3	96	97	36-165	0	30	
Benzene	ug/L	1.7	20	20	21.9	20.7	101	95	67-121	6	30	
Bromochloromethane	ug/L	1.0 U	20	20	17.9	18.5	90	92	62-128	3	30	
Bromodichloromethane	ug/L	1.0 U	20	20	19.2	18.5	96	92	66-127	4	30	
Bromoform	ug/L	1.0 U	20	20	15.0	14.4	75	72	71-127	4	30	
Bromomethane	ug/L	1.0 U	20	20	3.3	4.6	17	23	10-156	32	30	R1
Carbon disulfide	ug/L	1.0 U	20	20	19.3	18.3	96	91	45-131	5	30	
Carbon tetrachloride	ug/L	1.0 U	20	20	19.3	19.8	97	99	69-134	2	30	
Chlorobenzene	ug/L	6.5	20	20	25.0	24.3	92	89	69-119	3	30	
Chloroethane	ug/L	1.0 U	20	20	29.2	28.2	146	141	60-156	3	30	
Chloroform	ug/L	1.0 U	20	20	16.6	17.3	83	86	69-115	4	30	
Chloromethane	ug/L	1.0 U	20	20	19.9	21.3	99	107	52-145	7	30	
cis-1,2-Dichloroethene	ug/L	169	20	20	189	186	98	82	65-120	2	30	
cis-1,3-Dichloropropene	ug/L	1.0 U	20	20	16.7	17.2	83	86	57-125	3	30	
Dibromochloromethane	ug/L	1.0 U	20	20	16.4	17.5	82	87	64-131	6	30	
Dibromomethane	ug/L	1.0 U	20	20	17.1	17.6	86	88	56-133	3	30	
Ethylbenzene	ug/L	1.0 U	20	20	18.6	18.5	93	93	70-127	1	30	
Iodomethane	ug/L	50.0 U	20	20	50.0 U	50.0 U	13	17	10-152		30	
Methyl-tert-butyl ether	ug/L	0.37J	20	20	21.4	21.2	105	104	79-135	1	30	
Methylene Chloride	ug/L	1.0 U	20	20	16.2	14.3	81	72	54-133	13	30	
Naphthalene	ug/L	2.0 U	20	20	18.4	17.9	92	90	62-131	3	30	
Styrene	ug/L	1.0 U	20	20	18.4	18.3	92	91	65-121	0	30	
Tetrachloroethene	ug/L	1.0 U	20	20	19.4	17.9	97	90	77-125	8	30	
Toluene	ug/L	0.23J	20	20	18.6	17.8	92	88	77-125	4	30	
trans-1,2-Dichloroethene	ug/L	3.1	20	20	20.4	20.7	86	88	70-119	1	30	
trans-1,3-Dichloropropene	ug/L	1.0 U	20	20	15.9	15.8	80	79	52-125	1	30	
trans-1,4-Dichloro-2-butene	ug/L	5.0 U	20	20	9.3	8.6	46	43	13-100	7	30	
Trichloroethene	ug/L	24.7	20	20	44.0	44.4	97	98	74-128	1	30	
Trichlorofluoromethane	ug/L	1.0 U	20	20	31.3	31.7	156	159	54-164	2	30	
Vinyl acetate	ug/L	10.0 U	20	20	11.1	10.5	55	52	15-173	6	30	
Vinyl chloride	ug/L	355	20	20	378	367	111	59	60-131	3	30	ML
Xylene (Total)	ug/L	3.0 U	60	60	55.9	55.6	93	93	69-128	1	30	
1,2-Dichloroethane-d4 (S)	%						99	99	80-120			
4-Bromofluorobenzene (S)	%						102	100	79-129			
Dibromofluoromethane (S)	%						103	100	80-120			
Toluene-d8 (S)	%						98	99	80-120			

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

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.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1	RPD value was outside control limits.

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Coke Oven 4th Quarter GW
Pace Project No.: 30238793

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30238793001	**Trip Blank**	EPA 8260B	282678		
30238793002	**CO42-PZM004**	EPA 8260B	282678		
30238793003	**CO40-PZM008**	EPA 8260B	282678		
30238793004	**CO39-PZM042**	EPA 8260B	282678		
30238793005	**CO39-PZM007**	EPA 8260B	282678		
30238793006	**CO27-PZM046**	EPA 8260B	282678		
30238793007	**CO27-PZM012**	EPA 8260B	282678		
30238793008	**CO41-PZM001**	EPA 8260B	282678		
30238793009	**CO41-PZM036**	EPA 8260B	282678		

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Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

Company:	EnviroAnalytics Group
Address:	1430 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	jcalenda@enviroanalyticsgroup.com
Phone:	314-620-3056
Fax:	
Requested Due Date/TAT:	5-day

Section B Required Project Information:

Report To:	James Calenda
Copy To:	Steve Kabis
PO Number:	
Project Name:	Coke oven 4th Quarter GW
Project Number:	170384M-1-5

Section C Invoice Information:

Attention:	Laura Sargent
Company Name:	EnviroAnalytics Group
Address:	1650 Des Peres Road, Suite 303 St. Louis, MO 63131
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MD

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW WT
WATER	WW
WASTE WATER	P
PRODUCT	SL
SOIL/SOLID	OL
OIL	WP
WIPE	AR
AIR	OT
OTHER	TS
TISSUE	

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

WO#: 30238793
30238793

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Vocs + Napthalene	Resi	Pace Project No./ Lab I.D.
1	Trip Blank	WT	G			12-14-17	—		2				2						X		001
2	C042-PZM004	WT	G				1122		3				3						X		002
3	C040-PZM008	WT	G				1150		3				3						X		003
4	C039-PZM042	WT	G				1258		3				3						X		004
5	C039-PZM007	WT	G				1233		3				3						X		005
6	C027-PZM046	WT	G				1325		3				3						X		006
7	C027-PZM012	WT	G				1351		3				3						X		007
8	C041-PZM001	WT	G				1434		3				3						X		008
9	C041-PZM036	WT	G				1501		3				3						X		009
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Data Package Required? (Y/N):	[signature]	12-14-17	1440	David J Hillegan Pace	12/14/17	1631				
Data Validation Required? (Y/N):	David J Hillegan Pace	12/14/17	1930	[signature]	12/14/17	1840				
If data package is required, attach data package checklist.	[signature]	12/14/17	2235	[signature] Pace	12-14-17	2235	1.1	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12-14-17

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

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EnvicoAna. Project # 30238793

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MC
LIMS Login

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 8 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.1 °C Correction Factor: +0.0 °C Final Temp: 1.1 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AM 12-15-17

Comments:	Yes	No	N/A		
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.	
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	X			9.	
Correct Containers Used: -Pace Containers Used:	X			10.	
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.	
Organic Samples checked for dechlorination:			X	14.	
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions (VOA,) coliform, TOC, O&G, Phenolics			X	16. Initial when completed AM Date/time of preservation Lot # of added preservative	
Headspace in VOA Vials (>6mm):		X		17.	
Trip Blank Present: Trip Blank Custody Seals Present	X			18.	
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed:	Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

January 23, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
TEL:
FAX

RE: Sparrows Point IM Order No.: 1701014

Dear James Calenda:

PACE ANALYTICAL received 6 sample(s) on 1/19/2017 for the analyses presented in the following report.

Caitlin Panzarella

Caitlin Panzarella
Project Manager

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 1/18/2017 10:05:00 AM
Received : 1/19/2017 9:15:00 AM
Collected By CLIENT

Lab No. : 1701014-001
Client Sample ID: CELL 2 AS/SVE

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.40	ppbv	D	2	< 2.18	µg/m³	01/20/2017 11:40 AM
1,1,2,2-Tetrachloroethane	< 0.40	ppbv	D	2	< 2.75	µg/m³	01/20/2017 11:40 AM
1,1,2-Trichloroethane	< 0.20	ppbv	D	2	< 1.09	µg/m³	01/20/2017 11:40 AM
1,1-Dichloroethane	< 0.40	ppbv	D	2	< 1.62	µg/m³	01/20/2017 11:40 AM
1,1-Dichloroethene	< 0.40	ppbv	D	2	< 1.59	µg/m³	01/20/2017 11:40 AM
1,2-Dichloroethane	< 0.20	ppbv	D	2	< 0.81	µg/m³	01/20/2017 11:40 AM
1,2-Dichloroethene (trans)	< 0.40	ppbv	D	2	< 1.59	µg/m³	01/20/2017 11:40 AM
1,2-Dichloropropane	< 0.40	ppbv	D	2	< 1.85	µg/m³	01/20/2017 11:40 AM
1,3-Dichloropropene (cis)	< 0.40	ppbv	D	2	< 1.82	µg/m³	01/20/2017 11:40 AM
1,3-Dichloropropene (trans)	< 0.40	ppbv	D	2	< 1.82	µg/m³	01/20/2017 11:40 AM
Acetone	< 40.0	ppbv	DS	2	< 95.0	µg/m³	01/20/2017 11:40 AM
Benzene	919	ppbv	D	60	2940	µg/m³	01/20/2017 12:29 PM
Bromoform	< 0.40	ppbv	D	2	< 4.13	µg/m³	01/20/2017 11:40 AM
Carbon disulfide	< 0.40	ppbv	D	2	< 1.25	µg/m³	01/20/2017 11:40 AM
Carbon tetrachloride	< 0.20	ppbv	D	2	< 1.26	µg/m³	01/20/2017 11:40 AM
Chlorobenzene	< 0.40	ppbv	D	2	< 1.84	µg/m³	01/20/2017 11:40 AM
Chloroethane	< 0.40	ppbv	D	2	< 1.06	µg/m³	01/20/2017 11:40 AM
Chloroform	< 0.20	ppbv	D	2	< 0.98	µg/m³	01/20/2017 11:40 AM
Ethylbenzene	20.1	ppbv	D	2	87.5	µg/m³	01/20/2017 11:40 AM
Methyl butyl ketone	< 0.40	ppbv	D +	2	< 1.64	µg/m³	01/20/2017 11:40 AM
Methyl ethyl ketone	< 0.40	ppbv	D	2	< 1.18	µg/m³	01/20/2017 11:40 AM
Methyl isobutyl ketone	< 0.40	ppbv	D	2	< 1.64	µg/m³	01/20/2017 11:40 AM
Methylene chloride	< 2.00	ppbv	D	2	< 7.77	µg/m³	01/20/2017 11:40 AM
Tetrachloroethene	< 0.20	ppbv	D	2	< 1.36	µg/m³	01/20/2017 11:40 AM
Toluene	440	ppbv	D	60	1660	µg/m³	01/20/2017 12:29 PM
Trichloroethene	< 0.20	ppbv	D	2	< 1.07	µg/m³	01/20/2017 11:40 AM
Vinyl chloride	< 0.40	ppbv	D	2	< 1.02	µg/m³	01/20/2017 11:40 AM
Xylenes (m&p)	87.2	ppbv	D	2	379	µg/m³	01/20/2017 11:40 AM
Xylenes (o)	43.1	ppbv	D	2	187	µg/m³	01/20/2017 11:40 AM
Surr: 4-Bromofluorobenzene	98.1	%Rec	D	Limit 70-130	No M.W. Data		01/20/2017 11:40 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 1/23/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 1/18/2017 9:50:00 AM
Received : 1/19/2017 9:15:00 AM
Collected By CLIENT

Lab No. : 1701014-002
Client Sample ID: CELL 2 AST OFF GAS

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 160	ppbv	D	800	< 873	µg/m³	01/20/2017 3:24 PM
1,1,2,2-Tetrachloroethane	< 160	ppbv	D	800	< 1100	µg/m³	01/20/2017 3:24 PM
1,1,2-Trichloroethane	< 80.0	ppbv	D	800	< 437	µg/m³	01/20/2017 3:24 PM
1,1-Dichloroethane	< 160	ppbv	D	800	< 648	µg/m³	01/20/2017 3:24 PM
1,1-Dichloroethene	< 160	ppbv	D	800	< 634	µg/m³	01/20/2017 3:24 PM
1,2-Dichloroethane	< 80.0	ppbv	D	800	< 324	µg/m³	01/20/2017 3:24 PM
1,2-Dichloroethene (trans)	< 160	ppbv	D	800	< 634	µg/m³	01/20/2017 3:24 PM
1,2-Dichloropropane	< 160	ppbv	D	800	< 739	µg/m³	01/20/2017 3:24 PM
1,3-Dichloropropene (cis)	< 160	ppbv	D	800	< 726	µg/m³	01/20/2017 3:24 PM
1,3-Dichloropropene (trans)	< 160	ppbv	D	800	< 726	µg/m³	01/20/2017 3:24 PM
Acetone	< 16,000	ppbv	DS	800	< 38000	µg/m³	01/20/2017 3:24 PM
Benzene	126,000	ppbv	D	4000	402000	µg/m³	01/20/2017 3:57 PM
Bromoform	< 160	ppbv	D	800	< 1650	µg/m³	01/20/2017 3:24 PM
Carbon disulfide	< 160	ppbv	D	800	< 498	µg/m³	01/20/2017 3:24 PM
Carbon tetrachloride	< 80.0	ppbv	D	800	< 503	µg/m³	01/20/2017 3:24 PM
Chlorobenzene	< 160	ppbv	D	800	< 737	µg/m³	01/20/2017 3:24 PM
Chloroethane	< 160	ppbv	D	800	< 422	µg/m³	01/20/2017 3:24 PM
Chloroform	< 80.0	ppbv	D	800	< 391	µg/m³	01/20/2017 3:24 PM
Ethylbenzene	430	ppbv	D	800	1870	µg/m³	01/20/2017 3:24 PM
Methyl butyl ketone	< 160	ppbv	D +	800	< 655	µg/m³	01/20/2017 3:24 PM
Methyl ethyl ketone	< 160	ppbv	D	800	< 472	µg/m³	01/20/2017 3:24 PM
Methyl isobutyl ketone	< 160	ppbv	D	800	< 656	µg/m³	01/20/2017 3:24 PM
Methylene chloride	< 800	ppbv	D	800	< 3110	µg/m³	01/20/2017 3:24 PM
Tetrachloroethene	< 80.0	ppbv	D	800	< 543	µg/m³	01/20/2017 3:24 PM
Toluene	16,600	ppbv	D	800	62400	µg/m³	01/20/2017 3:24 PM
Trichloroethene	< 80.0	ppbv	D	800	< 430	µg/m³	01/20/2017 3:24 PM
Vinyl chloride	< 160	ppbv	D	800	< 409	µg/m³	01/20/2017 3:24 PM
Xylenes (m&p)	3,800	ppbv	D	800	16500	µg/m³	01/20/2017 3:24 PM
Xylenes (o)	1,320	ppbv	D	800	5740	µg/m³	01/20/2017 3:24 PM
Surr: 4-Bromofluorobenzene	96.3	%Rec	D Limit	70-130	No M.W. Data		01/20/2017 3:24 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 1/23/2017

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1701014**

23-Jan-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107317**

Sample ID **LFB011917** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107317**
Client ID: **ZZZZZZ** Batch ID: **R107317** TestNo: **ETO-15** Analysis Date: **1/19/2017** SeqNo: **2389118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	10.9	0.20	10.00	0	109	70	130				
Chloroethane	9.22	0.20	10.00	0	92.2	70	130				
Methylene chloride	7.94	0.20	10.00	0	79.4	70	130				
Acetone	6.85	0.20	10.00	0	68.5	70	130				S
Carbon disulfide	10.3	0.20	10.00	0	103	70	130				
1,1-Dichloroethene	9.13	0.20	10.00	0	91.3	70	130				
1,1-Dichloroethane	9.43	0.20	10.00	0	94.3	70	130				
1,2-Dichloroethene (trans)	10.0	0.20	10.00	0	100	70	130				
Methyl ethyl ketone	8.50	0.20	10.00	0	85.0	70	130				
Chloroform	10.0	0.20	10.00	0	100	70	130				
1,2-Dichloroethane	9.04	0.20	10.00	0	90.4	70	130				
1,1,1-Trichloroethane	8.55	0.20	10.00	0	85.5	70	130				
Carbon tetrachloride	9.23	0.20	10.00	0	92.3	70	130				
1,2-Dichloropropane	8.30	0.20	10.00	0	83.0	70	130				
1,3-Dichloropropene (cis)	8.77	0.20	10.00	0	87.7	70	130				
Trichloroethene	9.53	0.20	10.00	0	95.3	70	130				
Benzene	8.17	0.20	10.00	0	81.7	70	130				
1,3-Dichloropropene (trans)	9.52	0.20	10.00	0	95.2	70	130				
1,1,2-Trichloroethane	9.48	0.20	10.00	0	94.8	70	130				
Bromoform	10.3	0.20	10.00	0	103	70	130				
Methyl isobutyl ketone	7.38	0.20	10.00	0	73.8	70	130				
Methyl butyl ketone	7.21	0.20	10.00	0	72.1	70	130				
Tetrachloroethene	9.99	0.20	10.00	0	99.9	70	130				
1,1,2,2-Tetrachloroethane	11.1	0.20	10.00	0	111	70	130				
Toluene	10.1	0.20	10.00	0	101	70	130				
Chlorobenzene	10.2	0.20	10.00	0	102	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
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Melville, NY 11747
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QC SUMMARY REPORT

WO#: **1701014**

23-Jan-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107317**

Sample ID **LFB011917** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107317**
Client ID: **ZZZZZZ** Batch ID: **R107317** TestNo: **ETO-15** Analysis Date: **1/19/2017** SeqNo: **2389118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	10.5	0.20	10.00	0	105	70	130				
Xylenes (m&p)	21.4	0.20	20.00	0	107	70	130				
Xylenes (o)	10.9	0.20	10.00	0	109	70	130				
Surr: 4-Bromofluorobenzene	9.97		10.00		99.7	70	130				

Sample ID **VBLK011917** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107317**
Client ID: **PBW** Batch ID: **R107317** TestNo: **ETO-15** Analysis Date: **1/19/2017** SeqNo: **2389125**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1701014**
23-Jan-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107317**

Sample ID **VBLK011917** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107317**
Client ID: **PBW** Batch ID: **R107317** TestNo: **ETO-15** Analysis Date: **1/19/2017** SeqNo: **2389125**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	9.12		10.00		91.2	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

Sample Receipt Checklist

Client Name **ENVIRO-MD** Date and Time Received: **1/19/2017 9:15:00 AM**

Work Order Number: **1701014** RcptNo: **1** Received by **Jaclyn Kuri**

Completed by: Jaclyn Kuri Reviewed by: Caitlin Panzarella

Completed Date: 1/19/2017 5:44:36 PM Reviewed Date: 1/23/2017 3:56:16 PM

Carrier name: FedEx

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐	NA	☐
Preservative added to bottles:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA	☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA	☐
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	°
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☐	No ☑		
Airbill or Sticker?	Air Bil ☑	Sticker ☐	Not Present	☐
Airbill No:	7182 3634 4012			

Case Number: SDG: SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1701014

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

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AIR: CHAIN-OF-CUSTODY / Analytical Request Document

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

ENVIRO-MD

Page: 1 of 1

Section A Required Client Information:

Company: ENVIRO ANALYTICS GROUP
Address: 1430 Sparrows Point Blvd
Sparrows Point, MD 21219
Email To: Jburke@enviroanalyticsgroup.com
Phone: Fax:
Requested Due Date/TAT: STD

Section B Required Project Information:

Report To: James Calenda
Copy To: Josh Burke
Purchase Order No.:
Project Name:
Project Number:

Section C Invoice Information:

Attention: Laura Sargent
Company Name: Enviro Analytics Group
Address: 1650 Des Peres Rd, Suite 303 St Louis, MO 63131
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other X

Location of Sampling by State MD

Reporting Units: ug/m³ X mg/m³ X PPBV ___ PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other____

Section D Required Client Information

AIR SAMPLE ID — Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED START DATE	START TIME	STOP DATE	STOP TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Canister Pressure (Initial Lab)	Canister Pressure (Final Lab)	Summa Can Number	Flow Control Number	PM10	3C: Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1	Cell 2 AS/SVE	6LC		1-18-17	1005			30"	6"	30"		847	QT1							X			M01014
2	Cell 2 AST OFF GAS	6LC		1-18-17	0950			30"	5"	30"		855	QT5							X			
3	UNUSED									30"		3407	QT12										
4	UNUSED									30"		3413	QT15										
5	UNUSED									30"		3416	QT17										
6	UNUSED									30"		3427	QT24										
7																							
8																							
9																							
10																							
11																							
12																							

Comments: SPARROWS POINT MONTHLY

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	1-18-17	1120	[signature]	1/19/17	09:15

SAMPLE CONDITIONS: Temp in °C ___ Custody Sealed Cooler Y/N ___ Samples Intact Y/N ___

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joshua Burke
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 01/18/17

7182 3634 4012

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

March 24, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: Monthly Air
Pace Project No.: 7014084

Dear James Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on March 01, 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.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Caitlin Panzarella

Caitlin Panzarella
caitlin.panzarella@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Josh Burke, Enviro Analytics Group

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AIR: CHAIN-OF-CUSTODY / An

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

WO#:7014084

7014084

Page: 1 of 1

Section A Required Client Information:

Company: ENVIRO ANALYTICS GROUP
Address: 1430 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To: jcalenda@enviroanalyticsgroup.com
Phone: Fax:
Requested Due Date/TAT: STD

Section B Required Project Information:

Report To: Josh Burke
Copy To: James Calenda
Purchase Order No.:
Project Name:
Project Number:

Section C Invoice Information:

Attention: Laura Sargent
Company Name: Enviro Analytics Group
Address: 1650 Des Peres Rd, Suite 303, St. Louis, MO 63131
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other X

Location of Sampling by State: MD

Reporting Units: ug/m³ X mg/m³ X PPBV X PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other_____

Section D Required Client Information

AIR SAMPLE ID — Sample IDs MUST BE UNIQUE

Valid Media Codes: Tedlar Bag TB; 1 Liter Summa Can 1LC; 6 Liter Summa Can 6LC; Low Volume Puff LVP; High Volume Puff HVP; Other PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED START DATE (COMPOSITE START END/GRAB)	START TIME	STOP DATE (COMPOSITE -)	STOP TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Canister Pressure (Initial Lab)	Canister Pressure (Final Lab)	Summa Can Number	Flow Control Number	PM10	3C- Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1	Cell 5 INF			2/28/17	0950			-30	0	30"		8859	QT1							X			001
2	Cell 5 AST OG			↓	0945			↓	↓	30"		3398	QT3							X			002
3	Cell 3			↓	1050			↓	↓	30"		3413	QT5							X			003
4										30"		3414	QT12										006
5	Cell 2 SVE			↓	1130			↓	↓	30"		1618	QT17							X			004
6	Cell 2 AS OG			↓	1135			↓	↓	30"		1626	QT18							X			005
7																							
8																							
9																							
10																							
11																							
12																							

Comments:

SPARROWS POINT MONTHLY

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] / EAG	2/28/17	1200	[signature]	3/1/17	1220

SAMPLE CONDITIONS: Temp in °C; Custody Sealed Cooler Y/N; Samples Intact Y/N

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jeff Wilson
SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 02/28/17

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

March 24, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
TEL:
FAX

RE: Sparrows Point IM Order No.: 1703001

Dear James Calenda:

PACE ANALYTICAL received 5 sample(s) on 3/1/2017 for the analyses presented in the following report.

Caitlin Panzarella

Caitlin Panzarella
Project Manager

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 2/28/2017 9:50:00 AM
Received : 3/1/2017 12:20:00 PM
Collected By CLIENT

Lab No. : 1703001-001
Client Sample ID: CELL 5 INF

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	03/07/2017 11:45 PM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	03/07/2017 11:45 PM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	03/07/2017 11:45 PM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	03/07/2017 11:45 PM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	03/07/2017 11:45 PM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	03/07/2017 11:45 PM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	03/07/2017 11:45 PM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	03/07/2017 11:45 PM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	03/07/2017 11:45 PM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	03/07/2017 11:45 PM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	03/07/2017 11:45 PM
Benzene	0.53	ppbv		1	1.70	µg/m³	03/07/2017 11:45 PM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	03/07/2017 11:45 PM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	03/07/2017 11:45 PM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	03/07/2017 11:45 PM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	03/07/2017 11:45 PM
Chloroethane	< 0.20	ppbv	c	1	< 0.53	µg/m³	03/07/2017 11:45 PM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	03/07/2017 11:45 PM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	03/07/2017 11:45 PM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	03/07/2017 11:45 PM
Methyl ethyl ketone	< 0.20	ppbv		1	< 0.59	µg/m³	03/07/2017 11:45 PM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	03/07/2017 11:45 PM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	03/07/2017 11:45 PM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	03/07/2017 11:45 PM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	03/07/2017 11:45 PM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	03/07/2017 11:45 PM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	03/07/2017 11:45 PM
Xylenes (m&p)	< 0.40	ppbv		1	< 1.74	µg/m³	03/07/2017 11:45 PM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	03/07/2017 11:45 PM
Surr: 4-Bromofluorobenzene	97.0	%Rec	Limit	70-130	No M.W. Data		03/07/2017 11:45 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Date Reported : 3/24/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 2/28/2017 9:45:00 AM
Received : 3/1/2017 12:20:00 PM
Collected By CLIENT

Lab No. : 1703001-002
Client Sample ID: CELL 5 AST OG

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ppbv	D	10	< 10.9	µg/m³	03/08/2017 1:31 AM
1,1,2,2-Tetrachloroethane	< 2.00	ppbv	D	10	< 13.7	µg/m³	03/08/2017 1:31 AM
1,1,2-Trichloroethane	< 1.00	ppbv	D	10	< 5.46	µg/m³	03/08/2017 1:31 AM
1,1-Dichloroethane	< 2.00	ppbv	D	10	< 8.09	µg/m³	03/08/2017 1:31 AM
1,1-Dichloroethene	< 2.00	ppbv	D	10	< 7.93	µg/m³	03/08/2017 1:31 AM
1,2-Dichloroethane	< 1.00	ppbv	D	10	< 4.05	µg/m³	03/08/2017 1:31 AM
1,2-Dichloroethene (trans)	< 2.00	ppbv	D	10	< 7.93	µg/m³	03/08/2017 1:31 AM
1,2-Dichloropropane	< 2.00	ppbv	D	10	< 9.24	µg/m³	03/08/2017 1:31 AM
1,3-Dichloropropene (cis)	< 2.00	ppbv	D	10	< 9.08	µg/m³	03/08/2017 1:31 AM
1,3-Dichloropropene (trans)	< 2.00	ppbv	D	10	< 9.08	µg/m³	03/08/2017 1:31 AM
Acetone	< 200	ppbv	D	10	< 475	µg/m³	03/08/2017 1:31 AM
Benzene	617	ppbv	D	20	1970	µg/m³	03/08/2017 9:20 AM
Bromoform	< 2.00	ppbv	D	10	< 20.7	µg/m³	03/08/2017 1:31 AM
Carbon disulfide	< 2.00	ppbv	D	10	< 6.23	µg/m³	03/08/2017 1:31 AM
Carbon tetrachloride	< 1.00	ppbv	D	10	< 6.29	µg/m³	03/08/2017 1:31 AM
Chlorobenzene	< 2.00	ppbv	D	10	< 9.21	µg/m³	03/08/2017 1:31 AM
Chloroethane	< 2.00	ppbv	Dc	10	< 5.28	µg/m³	03/08/2017 1:31 AM
Chloroform	< 1.00	ppbv	D	10	< 4.88	µg/m³	03/08/2017 1:31 AM
Ethylbenzene	17.9	ppbv	D	10	77.7	µg/m³	03/08/2017 1:31 AM
Methyl butyl ketone	< 2.00	ppbv	D +	10	< 8.19	µg/m³	03/08/2017 1:31 AM
Methyl ethyl ketone	< 2.00	ppbv	D	10	< 5.90	µg/m³	03/08/2017 1:31 AM
Methyl isobutyl ketone	< 2.00	ppbv	D	10	< 8.20	µg/m³	03/08/2017 1:31 AM
Methylene chloride	< 10.0	ppbv	D	10	< 38.8	µg/m³	03/08/2017 1:31 AM
Tetrachloroethene	< 1.00	ppbv	D	10	< 6.78	µg/m³	03/08/2017 1:31 AM
Toluene	336	ppbv	D	10	1270	µg/m³	03/08/2017 1:31 AM
Trichloroethene	< 1.00	ppbv	D	10	< 5.37	µg/m³	03/08/2017 1:31 AM
Vinyl chloride	< 2.00	ppbv	D	10	< 5.11	µg/m³	03/08/2017 1:31 AM
Xylenes (m&p)	293	ppbv	D	10	1270	µg/m³	03/08/2017 1:31 AM
Xylenes (o)	111	ppbv	D	10	482	µg/m³	03/08/2017 1:31 AM
Surr: 4-Bromofluorobenzene	99.3	%Rec	D Limit	70-130	No M.W. Data		03/08/2017 1:31 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 3/24/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 2/28/2017 10:50:00 AM
Received : 3/1/2017 12:20:00 PM
Collected By

Lab No. : 1703001-003
Client Sample ID: CELL 3

Sample Information:
Type :

Origin: Raw Well

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ppbv	D	10	< 10.9	µg/m³	03/08/2017 2:06 AM
1,1,2,2-Tetrachloroethane	< 2.00	ppbv	D	10	< 13.7	µg/m³	03/08/2017 2:06 AM
1,1,2-Trichloroethane	< 1.00	ppbv	D	10	< 5.46	µg/m³	03/08/2017 2:06 AM
1,1-Dichloroethane	< 2.00	ppbv	D	10	< 8.09	µg/m³	03/08/2017 2:06 AM
1,1-Dichloroethene	< 2.00	ppbv	D	10	< 7.93	µg/m³	03/08/2017 2:06 AM
1,2-Dichloroethane	< 1.00	ppbv	D	10	< 4.05	µg/m³	03/08/2017 2:06 AM
1,2-Dichloroethene (trans)	< 2.00	ppbv	D	10	< 7.93	µg/m³	03/08/2017 2:06 AM
1,2-Dichloropropane	< 2.00	ppbv	D	10	< 9.24	µg/m³	03/08/2017 2:06 AM
1,3-Dichloropropene (cis)	< 2.00	ppbv	D	10	< 9.08	µg/m³	03/08/2017 2:06 AM
1,3-Dichloropropene (trans)	< 2.00	ppbv	D	10	< 9.08	µg/m³	03/08/2017 2:06 AM
Acetone	< 200	ppbv	D	10	< 475	µg/m³	03/08/2017 2:06 AM
Benzene	6,780	ppbv	D	218	21700	µg/m³	03/08/2017 10:48 AM
Bromoform	< 2.00	ppbv	D	10	< 20.7	µg/m³	03/08/2017 2:06 AM
Carbon disulfide	< 2.00	ppbv	D	10	< 6.23	µg/m³	03/08/2017 2:06 AM
Carbon tetrachloride	< 1.00	ppbv	D	10	< 6.29	µg/m³	03/08/2017 2:06 AM
Chlorobenzene	< 2.00	ppbv	D	10	< 9.21	µg/m³	03/08/2017 2:06 AM
Chloroethane	< 2.00	ppbv	Dc	10	< 5.28	µg/m³	03/08/2017 2:06 AM
Chloroform	< 1.00	ppbv	D	10	< 4.88	µg/m³	03/08/2017 2:06 AM
Ethylbenzene	10.0	ppbv	D	10	43.5	µg/m³	03/08/2017 2:06 AM
Methyl butyl ketone	< 2.00	ppbv	D +	10	< 8.19	µg/m³	03/08/2017 2:06 AM
Methyl ethyl ketone	< 2.00	ppbv	D	10	< 5.90	µg/m³	03/08/2017 2:06 AM
Methyl isobutyl ketone	< 2.00	ppbv	D	10	< 8.20	µg/m³	03/08/2017 2:06 AM
Methylene chloride	< 10.0	ppbv	D	10	< 38.8	µg/m³	03/08/2017 2:06 AM
Tetrachloroethene	< 1.00	ppbv	D	10	< 6.78	µg/m³	03/08/2017 2:06 AM
Toluene	< 872	ppbv	D	218	< 3280	µg/m³	03/08/2017 10:48 AM
Trichloroethene	< 1.00	ppbv	D	10	< 5.37	µg/m³	03/08/2017 2:06 AM
Vinyl chloride	< 2.00	ppbv	D	10	< 5.11	µg/m³	03/08/2017 2:06 AM
Xylenes (m&p)	108	ppbv	D	10	471	µg/m³	03/08/2017 2:06 AM
Xylenes (o)	72.2	ppbv	D	10	314	µg/m³	03/08/2017 2:06 AM
Surr: 4-Bromofluorobenzene	96.6	%Rec	D Limit	70-130	No M.W. Data		03/08/2017 2:06 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 3/24/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 2/28/2017 11:30:00 AM
Received : 3/1/2017 12:20:00 PM
Collected By

Lab No. : 1703001-004
Client Sample ID: CELL 2 SVE

Sample Information:
Type :

Origin: Raw Well

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	03/08/2017 12:22 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	03/08/2017 12:22 AM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	03/08/2017 12:22 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	03/08/2017 12:22 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	03/08/2017 12:22 AM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	03/08/2017 12:22 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	03/08/2017 12:22 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	03/08/2017 12:22 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	03/08/2017 12:22 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	03/08/2017 12:22 AM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	03/08/2017 12:22 AM
Benzene	110	ppbv	D	5	351	µg/m³	03/08/2017 12:56 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	03/08/2017 12:22 AM
Carbon disulfide	0.20	ppbv		1	0.63	µg/m³	03/08/2017 12:22 AM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	03/08/2017 12:22 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	03/08/2017 12:22 AM
Chloroethane	< 0.20	ppbv	c	1	< 0.53	µg/m³	03/08/2017 12:22 AM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	03/08/2017 12:22 AM
Ethylbenzene	3.58	ppbv		1	15.5	µg/m³	03/08/2017 12:22 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	03/08/2017 12:22 AM
Methyl ethyl ketone	0.26	ppbv		1	0.76	µg/m³	03/08/2017 12:22 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	03/08/2017 12:22 AM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	03/08/2017 12:22 AM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	03/08/2017 12:22 AM
Toluene	76.2	ppbv	D	5	287	µg/m³	03/08/2017 12:56 AM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	03/08/2017 12:22 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	03/08/2017 12:22 AM
Xylenes (m&p)	21.8	ppbv		1	94.9	µg/m³	03/08/2017 12:22 AM
Xylenes (o)	11.2	ppbv		1	48.5	µg/m³	03/08/2017 12:22 AM
Surr: 4-Bromofluorobenzene	102	%Rec	Limit	70-130	No M.W. Data		03/08/2017 12:22 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
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r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 3/24/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 2/28/2017 11:35:00 AM
Received : 3/1/2017 12:20:00 PM
Collected By

Lab No. : 1703001-005
Client Sample ID: CELL 2 AS OG

Sample Information:
Type :

Origin: Raw Well

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 21.2	ppbv	D	106	< 116	µg/m³	03/08/2017 3:00 PM
1,1,2,2-Tetrachloroethane	< 21.2	ppbv	D	106	< 146	µg/m³	03/08/2017 3:00 PM
1,1,2-Trichloroethane	< 10.6	ppbv	D	106	< 57.8	µg/m³	03/08/2017 3:00 PM
1,1-Dichloroethane	< 21.2	ppbv	D	106	< 85.8	µg/m³	03/08/2017 3:00 PM
1,1-Dichloroethene	< 21.2	ppbv	D	106	< 84.0	µg/m³	03/08/2017 3:00 PM
1,2-Dichloroethane	< 10.6	ppbv	D	106	< 42.9	µg/m³	03/08/2017 3:00 PM
1,2-Dichloroethene (trans)	< 21.2	ppbv	D	106	< 84.1	µg/m³	03/08/2017 3:00 PM
1,2-Dichloropropane	< 21.2	ppbv	D	106	< 98.0	µg/m³	03/08/2017 3:00 PM
1,3-Dichloropropene (cis)	< 21.2	ppbv	D	106	< 96.2	µg/m³	03/08/2017 3:00 PM
1,3-Dichloropropene (trans)	< 21.2	ppbv	D	106	< 96.2	µg/m³	03/08/2017 3:00 PM
Acetone	< 2,120	ppbv	D	106	< 5040	µg/m³	03/08/2017 3:00 PM
Benzene	22,400	ppbv	D	2120	71600	µg/m³	03/08/2017 12:55 PM
Bromoform	< 21.2	ppbv	D	106	< 219	µg/m³	03/08/2017 3:00 PM
Carbon disulfide	< 21.2	ppbv	D	106	< 66.0	µg/m³	03/08/2017 3:00 PM
Carbon tetrachloride	< 10.6	ppbv	D	106	< 66.7	µg/m³	03/08/2017 3:00 PM
Chlorobenzene	< 21.2	ppbv	D	106	< 97.6	µg/m³	03/08/2017 3:00 PM
Chloroethane	< 21.2	ppbv	Dc	106	< 55.9	µg/m³	03/08/2017 3:00 PM
Chloroform	< 10.6	ppbv	D	106	< 51.8	µg/m³	03/08/2017 3:00 PM
Ethylbenzene	54.8	ppbv	D	106	238	µg/m³	03/08/2017 3:00 PM
Methyl butyl ketone	< 21.2	ppbv	D +	106	< 86.8	µg/m³	03/08/2017 3:00 PM
Methyl ethyl ketone	< 21.2	ppbv	D	106	< 62.5	µg/m³	03/08/2017 3:00 PM
Methyl isobutyl ketone	< 21.2	ppbv	D	106	< 86.9	µg/m³	03/08/2017 3:00 PM
Methylene chloride	< 106	ppbv	D	106	< 412	µg/m³	03/08/2017 3:00 PM
Tetrachloroethene	< 10.6	ppbv	D	106	< 71.9	µg/m³	03/08/2017 3:00 PM
Toluene	989	ppbv	D	106	3730	µg/m³	03/08/2017 3:00 PM
Trichloroethene	< 10.6	ppbv	D	106	< 57.0	µg/m³	03/08/2017 3:00 PM
Vinyl chloride	< 21.2	ppbv	D	106	< 54.2	µg/m³	03/08/2017 3:00 PM
Xylenes (m&p)	425	ppbv	D	106	1840	µg/m³	03/08/2017 3:00 PM
Xylenes (o)	190	ppbv	D	106	826	µg/m³	03/08/2017 3:00 PM
Surr: 4-Bromofluorobenzene	99.5	%Rec	D Limit	70-130	No M.W. Data		03/08/2017 3:00 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Date Reported : 3/24/2017

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1703001**

24-Mar-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107396**

Sample ID **VBLK030717** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107396**
Client ID: **PBW** Batch ID: **R107396** TestNo: **ETO-15** Analysis Date: **3/7/2017** SeqNo: **2390736**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
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QC SUMMARY REPORT

WO#: **1703001**

24-Mar-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107396**

Sample ID **VBLK030717** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107396**
Client ID: **PBW** Batch ID: **R107396** TestNo: **ETO-15** Analysis Date: **3/7/2017** SeqNo: **2390736**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	9.56		10.00		95.6	70	130				

Sample ID **LFB030717** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107396**
Client ID: **ZZZZZZ** Batch ID: **R107396** TestNo: **ETO-15** Analysis Date: **3/7/2017** SeqNo: **2390737**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	8.52	0.20	10.00	0	85.2	70	130				
Chloroethane	8.58	0.20	10.00	0	85.8	70	130				
Methylene chloride	9.33	0.20	10.00	0	93.3	70	130				
Acetone	7.35	0.20	10.00	0	73.5	70	130				
Carbon disulfide	10.8	0.20	10.00	0	108	70	130				
1,1-Dichloroethene	8.83	0.20	10.00	0	88.3	70	130				
1,1-Dichloroethane	10.7	0.20	10.00	0	107	70	130				
1,2-Dichloroethene (trans)	10.1	0.20	10.00	0	101	70	130				
Methyl ethyl ketone	9.69	0.20	10.00	0	96.9	70	130				
Chloroform	10.9	0.20	10.00	0	109	70	130				
1,2-Dichloroethane	12.2	0.20	10.00	0	122	70	130				
1,1,1-Trichloroethane	9.12	0.20	10.00	0	91.2	70	130				
Carbon tetrachloride	9.94	0.20	10.00	0	99.4	70	130				
1,2-Dichloropropane	8.77	0.20	10.00	0	87.7	70	130				
1,3-Dichloropropene (cis)	9.44	0.20	10.00	0	94.4	70	130				
Trichloroethene	9.29	0.20	10.00	0	92.9	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
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Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1703001**

24-Mar-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107396**

Sample ID **LFB030717** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107396**
Client ID: **ZZZZZZ** Batch ID: **R107396** TestNo: **ETO-15** Analysis Date: **3/7/2017** SeqNo: **2390737**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	9.40	0.20	10.00	0	94.0	70	130				
1,3-Dichloropropene (trans)	9.51	0.20	10.00	0	95.1	70	130				
1,1,2-Trichloroethane	9.07	0.20	10.00	0	90.7	70	130				
Bromoform	11.4	0.20	10.00	0	114	70	130				
Methyl isobutyl ketone	7.38	0.20	10.00	0	73.8	70	130				
Methyl butyl ketone	7.26	0.20	10.00	0	72.6	70	130				
Tetrachloroethene	11.0	0.20	10.00	0	110	70	130				
1,1,2,2-Tetrachloroethane	10.8	0.20	10.00	0	108	70	130				
Toluene	9.88	0.20	10.00	0	98.8	70	130				
Chlorobenzene	10.3	0.20	10.00	0	103	70	130				
Ethylbenzene	10.4	0.20	10.00	0	104	70	130				
Xylenes (m&p)	21.3	0.20	20.00	0	107	70	130				
Xylenes (o)	10.8	0.20	10.00	0	108	70	130				
Surr: 4-Bromofluorobenzene	10.2		10.00		102	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

Sample Receipt Checklist

Client Name **ENVIRO-MD** Date and Time Received: **3/1/2017 12:20:00 PM**

Work Order Number: **1703001** RcptNo: **1** Received by **Linda Siciliano**

Completed by: Reviewed by: Caitlin Panzarella

Completed Date: 3/1/2017 4:24:45 PM Reviewed Date: 3/24/2017 9:34:36 AM

Carrier name: FedEx

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐	NA	☐
Preservative added to bottles:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☐	No ☐	NA	☑
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☐	NA	☑
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	°
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☑	No ☐		
Airbill or Sticker?	Air Bil ☑	Sticker ☐	Not Present	☐
Airbill No:	718236345137/5126/5115			

Case Number: SDG: SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1703001

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

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

April 10, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: MARCH IM
Pace Project No.: 7014721

Dear James Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on April 03, 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.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Caitlin Panzarella

Caitlin Panzarella
caitlin.panzarella@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Josh Burke, Enviro Analytics Group

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AIR: CHAIN-OF-CUSTODY

The Chain-of-Custody is a LEGAL DOCUMENT. All releva

WO#:7014721

7014721

Page: 1 of 1

Section A Required Client Information:

Company: ENVIRO ANALYTICS GROUP
Address: 1430 Sparrows Point Blvd
Sparrows Point, MD 21219
Email To: jcalenda@enviroanalyticsgroup.com
Phone: Fax:
Requested Due Date/TAT: STD

Section B Required Project Information:

Report To: Josh Burke
Copy To: James Calenda
Purchase Order No.:
Project Name: March IM
Project Number:

Section C Invoice Information:

Attention: Laura Sargent
Company Name: Enviro Analytics Group
Address: 1650 Des Peres Rd, Suite 303, St. Louis, MO 63131
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other X

Location of Sampling by State: MD

Reporting Units: ug/m³ X mg/m³ X PPBV X PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other_____

Method:

'Section D Required Client Information

AIR SAMPLE ID — Sample IDs MUST BE UNIQUE

Valid Media Codes: Tedlar Bag TB; 1 Liter Summa Can 1LC; 6 Liter Summa Can 6LC; Low Volume Puff LVP; High Volume Puff HVP; Other PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED START DATE	START TIME	STOP DATE	STOP TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Canister Pressure (Initial Lab)	Canister Pressure (Final Lab)	Summa Can Number	Flow Control Number	PM10	3C- Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID (1704002)
1	Cell 5 INF	6LC		3/31/17	1200					30"		846	QT1							X			-001
2	Cell 5 AS Off Gas	6LC		3/31/17	1205					30"		858	QT3							X			-002
3										30"		3405	QT12										
4	Cell 2 SVE	6LC		3/31/17	1250					30"		3407	QT15							X			-003
5										30"		3421	QT17										
6										30"		3426	QT18										
7																							
8																							
9																							
10																							
11																							
12																							

Comments:

SPARROW POINT MONTHLY

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	3/31/17	1335	[signature]	4/3/17	1209

SAMPLE CONDITIONS: Temp in °C ✓; Custody Sealed Cooler Y/N ✓; Samples Intact Y/N ✓

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jeff Wilson
SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY) 03/31/17

7257 5480 0841

Sample Condition Upon Rece

WO#:7014721

PM: CNP Due Date: 04/10/17
CLIENT: ENVIRO-MD

Pace Analytical

Client Name: Enviro-Md

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Optional
Proj. Due Date:
Proj. Name:

Tracking #: 7257 5480 0841

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used: TH077 TH078 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: _____

Temp should be above freezing to 6°C

Date and Initials of person examining contents: MP 4/3/17

		Comments:
Chain of Custody Present:	☑ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☑ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☑ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☑ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☑ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☑ No ☐ N/A	7.
Sufficient Volume:	☑ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☑ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☑ Yes ☐ No ☐ N/A	
Containers Intact:	☑ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☑ N/A	11.
Sample Labels match COC:	☑ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix SL WT OIL Air		
All containers needing preservation have been checked.	☐ Yes ☐ No ☑ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☑ N/A	Initial when completed: / Lot # of added preservative: / Date and Time preservative added:
Exceptions: VOA, micro, TOC, O&G		
Samples checked for dechlorination:	☐ Yes ☐ No ☑ N/A	14.
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 purchased): _____		

Field Data Required? Y / N

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

F-LI-C-002-rev.00

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

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

April 10, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
TEL:
FAX

RE: Sparrows Point IM Order No.: 1704002

Dear James Calenda:

PACE ANALYTICAL received 3 sample(s) on 4/3/2017 for the analyses presented in the following report.

Caitlin Panzarella

Caitlin Panzarella
Project Manager

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 3/31/2017 12:00:00 PM
Received : 4/3/2017 12:09:00 PM
Collected By CLIENT

Lab No. : 1704002-001
Client Sample ID: CELL 5 INF

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	04/08/2017 3:18 PM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	04/08/2017 3:18 PM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	04/08/2017 3:18 PM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	04/08/2017 3:18 PM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	04/08/2017 3:18 PM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	04/08/2017 3:18 PM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	04/08/2017 3:18 PM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	04/08/2017 3:18 PM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	04/08/2017 3:18 PM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	04/08/2017 3:18 PM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	04/08/2017 3:18 PM
Benzene	0.30	ppbv		1	0.97	µg/m³	04/08/2017 3:18 PM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	04/08/2017 3:18 PM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	04/08/2017 3:18 PM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	04/08/2017 3:18 PM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	04/08/2017 3:18 PM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	04/08/2017 3:18 PM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	04/08/2017 3:18 PM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	04/08/2017 3:18 PM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	04/08/2017 3:18 PM
Methyl ethyl ketone	< 0.20	ppbv		1	< 0.59	µg/m³	04/08/2017 3:18 PM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	04/08/2017 3:18 PM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	04/08/2017 3:18 PM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	04/08/2017 3:18 PM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	04/08/2017 3:18 PM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	04/08/2017 3:18 PM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	04/08/2017 3:18 PM
Xylenes (m&p)	0.47	ppbv		1	2.03	µg/m³	04/08/2017 3:18 PM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	04/08/2017 3:18 PM
Surr: 4-Bromofluorobenzene	100	%Rec	Limit	70-130	No M.W. Data		04/08/2017 3:18 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 4/10/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 3/31/2017 12:05:00 PM
Received : 4/3/2017 12:09:00 PM
Collected By CLIENT

Lab No. : 1704002-002
Client Sample ID: CELL 5 AST OG

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	04/08/2017 4:33 PM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	04/08/2017 4:33 PM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	04/08/2017 4:33 PM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	04/08/2017 4:33 PM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	04/08/2017 4:33 PM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	04/08/2017 4:33 PM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	04/08/2017 4:33 PM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	04/08/2017 4:33 PM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	04/08/2017 4:33 PM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	04/08/2017 4:33 PM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	04/08/2017 4:33 PM
Benzene	17.7	ppbv		1	56.7	µg/m³	04/08/2017 4:33 PM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	04/08/2017 4:33 PM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	04/08/2017 4:33 PM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	04/08/2017 4:33 PM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	04/08/2017 4:33 PM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	04/08/2017 4:33 PM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	04/08/2017 4:33 PM
Ethylbenzene	0.70	ppbv		1	3.05	µg/m³	04/08/2017 4:33 PM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	04/08/2017 4:33 PM
Methyl ethyl ketone	0.68	ppbv		1	1.99	µg/m³	04/08/2017 4:33 PM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	04/08/2017 4:33 PM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	04/08/2017 4:33 PM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	04/08/2017 4:33 PM
Toluene	11.7	ppbv		1	44.2	µg/m³	04/08/2017 4:33 PM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	04/08/2017 4:33 PM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	04/08/2017 4:33 PM
Xylenes (m&p)	10.4	ppbv		1	45.0	µg/m³	04/08/2017 4:33 PM
Xylenes (o)	4.64	ppbv		1	20.1	µg/m³	04/08/2017 4:33 PM
Surr: 4-Bromofluorobenzene	102	%Rec	Limit	70-130	No M.W. Data		04/08/2017 4:33 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
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S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Pace Analytical
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TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 3/31/2017 12:50:00 PM
Received : 4/3/2017 12:09:00 PM
Collected By CLIENT

Lab No. : 1704002-003
Client Sample ID: CELL 2 SVE

Sample Information:
Type :

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	04/08/2017 5:14 PM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	04/08/2017 5:14 PM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	04/08/2017 5:14 PM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	04/08/2017 5:14 PM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	04/08/2017 5:14 PM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	04/08/2017 5:14 PM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	04/08/2017 5:14 PM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	04/08/2017 5:14 PM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	04/08/2017 5:14 PM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	04/08/2017 5:14 PM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	04/08/2017 5:14 PM
Benzene	< 0.10	ppbv		1	< 0.32	µg/m³	04/08/2017 5:14 PM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	04/08/2017 5:14 PM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	04/08/2017 5:14 PM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	04/08/2017 5:14 PM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	04/08/2017 5:14 PM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	04/08/2017 5:14 PM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	04/08/2017 5:14 PM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	04/08/2017 5:14 PM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	04/08/2017 5:14 PM
Methyl ethyl ketone	< 0.20	ppbv		1	< 0.59	µg/m³	04/08/2017 5:14 PM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	04/08/2017 5:14 PM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	04/08/2017 5:14 PM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	04/08/2017 5:14 PM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	04/08/2017 5:14 PM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	04/08/2017 5:14 PM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	04/08/2017 5:14 PM
Xylenes (m&p)	< 0.40	ppbv		1	< 1.74	µg/m³	04/08/2017 5:14 PM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	04/08/2017 5:14 PM
Surr: 4-Bromofluorobenzene	99.4	%Rec	Limit	70-130	No M.W. Data		04/08/2017 5:14 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
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r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 4/10/2017

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1704002**

10-Apr-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107448**

Sample ID **VBLK040717** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107448**
Client ID: **PBW** Batch ID: **R107448** TestNo: **ETO-15** Analysis Date: **4/7/2017** SeqNo: **2391839**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1704002**

10-Apr-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107448**

Sample ID **VBLK040717** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107448**
Client ID: **PBW** Batch ID: **R107448** TestNo: **ETO-15** Analysis Date: **4/7/2017** SeqNo: **2391839**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	9.51		10.00		95.1	70	130				

Sample ID **LFB040717** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107448**
Client ID: **ZZZZZZ** Batch ID: **R107448** TestNo: **ETO-15** Analysis Date: **4/8/2017** SeqNo: **2391845**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	8.65	0.20	10.00	0	86.5	70	130				
Chloroethane	11.0	0.20	10.00	0	110	70	130				
Methylene chloride	8.75	0.20	10.00	0	87.5	70	130				
Acetone	9.26	0.20	10.00	0	92.6	70	130				
Carbon disulfide	8.68	0.20	10.00	0	86.8	70	130				
1,1-Dichloroethene	8.11	0.20	10.00	0	81.1	70	130				
1,1-Dichloroethane	8.92	0.20	10.00	0	89.2	70	130				
1,2-Dichloroethene (trans)	7.92	0.20	10.00	0	79.2	70	130				
Methyl ethyl ketone	9.25	0.20	10.00	0	92.5	70	130				
Chloroform	8.25	0.20	10.00	0	82.5	70	130				
1,2-Dichloroethane	9.21	0.20	10.00	0	92.1	70	130				
1,1,1-Trichloroethane	8.97	0.20	10.00	0	89.7	70	130				
Carbon tetrachloride	8.68	0.20	10.00	0	86.8	70	130				
1,2-Dichloropropane	8.32	0.20	10.00	0	83.2	70	130				
1,3-Dichloropropene (cis)	9.42	0.20	10.00	0	94.2	70	130				
Trichloroethene	7.88	0.20	10.00	0	78.8	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1704002**

10-Apr-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107448**

Sample ID **LFB040717** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107448**
Client ID: **ZZZZZZ** Batch ID: **R107448** TestNo: **ETO-15** Analysis Date: **4/8/2017** SeqNo: **2391845**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	8.05	0.20	10.00	0	80.5	70	130				
1,3-Dichloropropene (trans)	10.5	0.20	10.00	0	105	70	130				
1,1,2-Trichloroethane	7.80	0.20	10.00	0	78.0	70	130				
Bromoform	9.83	0.20	10.00	0	98.3	70	130				
Methyl isobutyl ketone	10.9	0.20	10.00	0	109	70	130				
Methyl butyl ketone	11.9	0.20	10.00	0	119	70	130				
Tetrachloroethene	8.36	0.20	10.00	0	83.6	70	130				
1,1,2,2-Tetrachloroethane	8.43	0.20	10.00	0	84.3	70	130				
Toluene	8.57	0.20	10.00	0	85.7	70	130				
Chlorobenzene	7.98	0.20	10.00	0	79.8	70	130				
Ethylbenzene	9.11	0.20	10.00	0	91.1	70	130				
Xylenes (m&p)	17.8	0.20	20.00	0	89.0	70	130				
Xylenes (o)	8.75	0.20	10.00	0	87.5	70	130				
Surr: 4-Bromofluorobenzene	10.1		10.00		101	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
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Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

Sample Receipt Checklist

Client Name **ENVIRO-MD** Date and Time Received: **4/3/2017 12:09:00 PM**

Work Order Number: **1704002** RcptNo: **1** Received by **Paige Doherty**

Completed by: Paige Doherty Reviewed by: Caitlin Panzarella

Completed Date: 4/3/2017 1:23:11 PM Reviewed Date: 4/10/2017 4:27:22 PM

Carrier name: FedEx

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐	NA	☐
Preservative added to bottles:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA	☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA	☐
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	°
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☑	No ☐		
Airbill or Sticker?	Air Bil ☑	Sticker ☐	Not Present	☐
Airbill No:	725759800841			

Case Number: SDG: SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1704002

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

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

April 27, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: Monthly Air (Omega 1704023)
Pace Project No.: 7016443

Dear James Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on April 20, 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.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Caitlin Panzarella

Caitlin Panzarella
caitlin.panzarella@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Josh Burke, Enviro Analytics Group

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AIR: CHA[illegible] [illegible]ocument

The Chain-of-Custody is a[illegible]

WO#:7016443

1704023

7016443

ENVIRO-MD

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRO ANALYTICS GROUP	Report To: Josh Burke	Attention: Laura Sargent
Address: 1430 Sparrows Point Blvd Sparrows Point, MD 21219	Copy To: James Calenda	Company Name: Enviro Analytics Group
		Address: 1650 Des Peres Rd, Suite 303, St. Louis, MO 63131
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name:	Pace Project Manager/Sales Rep.
Requested Due Date/TAT: STD	Project Number:	Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other X

Location of Sampling by State: MD

Reporting Units: ug/m³ X mg/m³ X PPBV X PPMV ___ Other ___

Report Level: II.___ III.___ IV.___ Other ___

Method: PM10, 3C-Fixed Gas (%), TO-3, TO-3M (Methane), TO-4 (PCBs), TO-13 (PAH), TO-14, TO-15, TO15 Short List*

ITEM #	Section D Required Client Information: AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED START DATE	START TIME	STOP DATE	STOP TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Canister Pressure (Initial Lab)	Canister Pressure (Final Lab)	Summa Can Number	Flow Control Number	PM10	3C-Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1		GLC								30"		3425	QT9							X			
2										30"		851	QT12							X			
3	Cell 5 AS Off Gas			4-19-17	0850			30		30"		865	QT15							X			-001
4	Cell 5 INF			4-19-17	0845			30		30"		853	QT17							X			002
5										30"		857	QT18							X			
6	Cell 2 SVE			4-19-17	1000			30		30"		1628	QT19							X			003
7	Cell 1			4-17-17	1230			30				3406								X			004
8	Cell 3			4-19-17	0925			30				866								X			-005
9																							
10																							
11																							
12																							

Comments:

SPARROWS PT MONTHLY

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] Wilson/EAG	4/19/17	1200	[signature]	4/20/17	1015

SAMPLE CONDITIONS

Temp In °C	Custody Sealed Cooler	Samples Intact
	Y/N	Y/N
	Y/N	Y/N
	Y/N	Y/N
	Y/N	Y/N

7257 5980 5350

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeff Wilson

SIGNATURE of SAMPLER: [signature] Wilson

DATE Signed (MM / DD / YY): 04/19/17

575 BROAD HOLLOW ROAD, MELVILLE, NY 11747 Air Technical Phone: 631.694.3040

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 4/19/2017 8:50:00 AM
Received : 4/20/2017 10:15:00 AM
Collected By CLIENT

Lab No. : 1704023-001
Client Sample ID: CELL 5 AS OFF GAS

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	04/21/2017 6:09 PM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	04/21/2017 6:09 PM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	04/21/2017 6:09 PM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	04/21/2017 6:09 PM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	04/21/2017 6:09 PM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	04/21/2017 6:09 PM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	04/21/2017 6:09 PM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	04/21/2017 6:09 PM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	04/21/2017 6:09 PM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	04/21/2017 6:09 PM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	04/21/2017 6:09 PM
Benzene	1,020	ppbv	D	200	3270	µg/m³	04/21/2017 7:29 PM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	04/21/2017 6:09 PM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	04/21/2017 6:09 PM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	04/21/2017 6:09 PM
Chlorobenzene	0.22	ppbv		1	1.00	µg/m³	04/21/2017 6:09 PM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	04/21/2017 6:09 PM
Chloroform	0.21	ppbv		1	1.04	µg/m³	04/21/2017 6:09 PM
Ethylbenzene	20.9	ppbv		1	90.9	µg/m³	04/21/2017 6:09 PM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	04/21/2017 6:09 PM
Methyl ethyl ketone	0.29	ppbv		1	0.85	µg/m³	04/21/2017 6:09 PM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	04/21/2017 6:09 PM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	04/21/2017 6:09 PM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	04/21/2017 6:09 PM
Toluene	< 800	ppbv	D	200	< 3010	µg/m³	04/21/2017 7:29 PM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	04/21/2017 6:09 PM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	04/21/2017 6:09 PM
Xylenes (m&p)	495	ppbv	D	200	2150	µg/m³	04/21/2017 7:29 PM
Xylenes (o)	177	ppbv	D	200	769	µg/m³	04/21/2017 7:29 PM
Surr: 4-Bromofluorobenzene	96.8	%Rec	Limit	70-130	No M.W. Data		04/21/2017 6:09 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 4/26/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 4/19/2017 8:45:00 AM
Received : 4/20/2017 10:15:00 AM
Collected By CLIENT

Lab No. : 1704023-002
Client Sample ID: CELL 5 INF

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	04/21/2017 4:49 PM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	04/21/2017 4:49 PM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	04/21/2017 4:49 PM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	04/21/2017 4:49 PM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	04/21/2017 4:49 PM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	04/21/2017 4:49 PM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	04/21/2017 4:49 PM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	04/21/2017 4:49 PM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	04/21/2017 4:49 PM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	04/21/2017 4:49 PM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	04/21/2017 4:49 PM
Benzene	0.39	ppbv		1	1.24	µg/m³	04/21/2017 4:49 PM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	04/21/2017 4:49 PM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	04/21/2017 4:49 PM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	04/21/2017 4:49 PM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	04/21/2017 4:49 PM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	04/21/2017 4:49 PM
Chloroform	0.12	ppbv		1	0.59	µg/m³	04/21/2017 4:49 PM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	04/21/2017 4:49 PM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	04/21/2017 4:49 PM
Methyl ethyl ketone	< 0.20	ppbv		1	< 0.59	µg/m³	04/21/2017 4:49 PM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	04/21/2017 4:49 PM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	04/21/2017 4:49 PM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	04/21/2017 4:49 PM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	04/21/2017 4:49 PM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	04/21/2017 4:49 PM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	04/21/2017 4:49 PM
Xylenes (m&p)	0.51	ppbv		1	2.22	µg/m³	04/21/2017 4:49 PM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	04/21/2017 4:49 PM
Surr: 4-Bromofluorobenzene	98.3	%Rec	Limit	70-130	No M.W. Data		04/21/2017 4:49 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 4/19/2017 10:00:00 AM
Received : 4/20/2017 10:15:00 AM
Collected By CLIENT

Lab No. : 1704023-003
Client Sample ID: CELL 2 SVE

Sample Information:
Type :

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	04/21/2017 5:29 PM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	04/21/2017 5:29 PM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	04/21/2017 5:29 PM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	04/21/2017 5:29 PM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	04/21/2017 5:29 PM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	04/21/2017 5:29 PM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	04/21/2017 5:29 PM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	04/21/2017 5:29 PM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	04/21/2017 5:29 PM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	04/21/2017 5:29 PM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	04/21/2017 5:29 PM
Benzene	2.18	ppbv		1	6.95	µg/m³	04/21/2017 5:29 PM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	04/21/2017 5:29 PM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	04/21/2017 5:29 PM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	04/21/2017 5:29 PM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	04/21/2017 5:29 PM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	04/21/2017 5:29 PM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	04/21/2017 5:29 PM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	04/21/2017 5:29 PM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	04/21/2017 5:29 PM
Methyl ethyl ketone	< 0.20	ppbv		1	< 0.59	µg/m³	04/21/2017 5:29 PM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	04/21/2017 5:29 PM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	04/21/2017 5:29 PM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	04/21/2017 5:29 PM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	04/21/2017 5:29 PM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	04/21/2017 5:29 PM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	04/21/2017 5:29 PM
Xylenes (m&p)	< 0.40	ppbv		1	< 1.74	µg/m³	04/21/2017 5:29 PM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	04/21/2017 5:29 PM
Surr: 4-Bromofluorobenzene	96.1	%Rec	Limit	70-130	No M.W. Data		04/21/2017 5:29 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 4/17/2017 12:30:00 PM
Received : 4/20/2017 10:15:00 AM
Collected By CLIENT

Lab No. : 1704023-004
Client Sample ID: CELL 1

Sample Information:
Type :

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 8.00	ppbv	D	40	< 43.7	µg/m³	04/21/2017 8:08 PM
1,1,2,2-Tetrachloroethane	< 8.00	ppbv	D	40	< 54.9	µg/m³	04/21/2017 8:08 PM
1,1,2-Trichloroethane	< 4.00	ppbv	D	40	< 21.8	µg/m³	04/21/2017 8:08 PM
1,1-Dichloroethane	< 8.00	ppbv	D	40	< 32.4	µg/m³	04/21/2017 8:08 PM
1,1-Dichloroethene	< 8.00	ppbv	D	40	< 31.7	µg/m³	04/21/2017 8:08 PM
1,2-Dichloroethane	< 4.00	ppbv	D	40	< 16.2	µg/m³	04/21/2017 8:08 PM
1,2-Dichloroethene (trans)	< 8.00	ppbv	D	40	< 31.7	µg/m³	04/21/2017 8:08 PM
1,2-Dichloropropane	< 8.00	ppbv	D	40	< 37.0	µg/m³	04/21/2017 8:08 PM
1,3-Dichloropropene (cis)	< 8.00	ppbv	D	40	< 36.3	µg/m³	04/21/2017 8:08 PM
1,3-Dichloropropene (trans)	< 8.00	ppbv	D	40	< 36.3	µg/m³	04/21/2017 8:08 PM
Acetone	< 800	ppbv	D	40	< 1900	µg/m³	04/21/2017 8:08 PM
Benzene	49,800	ppbv	D	2000	159000	µg/m³	04/21/2017 9:54 PM
Bromoform	< 8.00	ppbv	D	40	< 82.7	µg/m³	04/21/2017 8:08 PM
Carbon disulfide	< 8.00	ppbv	D	40	< 24.9	µg/m³	04/21/2017 8:08 PM
Carbon tetrachloride	< 4.00	ppbv	D	40	< 25.2	µg/m³	04/21/2017 8:08 PM
Chlorobenzene	< 8.00	ppbv	D	40	< 36.8	µg/m³	04/21/2017 8:08 PM
Chloroethane	< 8.00	ppbv	D	40	< 21.1	µg/m³	04/21/2017 8:08 PM
Chloroform	< 4.00	ppbv	D	40	< 19.5	µg/m³	04/21/2017 8:08 PM
Ethylbenzene	129	ppbv	D	40	559	µg/m³	04/21/2017 8:08 PM
Methyl butyl ketone	< 8.00	ppbv	D +	40	< 32.8	µg/m³	04/21/2017 8:08 PM
Methyl ethyl ketone	< 8.00	ppbv	D	40	< 23.6	µg/m³	04/21/2017 8:08 PM
Methyl isobutyl ketone	< 8.00	ppbv	D	40	< 32.8	µg/m³	04/21/2017 8:08 PM
Methylene chloride	< 40.0	ppbv	D	40	< 155	µg/m³	04/21/2017 8:08 PM
Tetrachloroethene	< 4.00	ppbv	D	40	< 27.1	µg/m³	04/21/2017 8:08 PM
Toluene	< 8,000	ppbv	D	2000	< 30100	µg/m³	04/21/2017 9:54 PM
Trichloroethene	< 4.00	ppbv	D	40	< 21.5	µg/m³	04/21/2017 8:08 PM
Vinyl chloride	< 8.00	ppbv	D	40	< 20.4	µg/m³	04/21/2017 8:08 PM
Xylenes (m&p)	698	ppbv	D	40	3030	µg/m³	04/21/2017 8:08 PM
Xylenes (o)	435	ppbv	D	40	1890	µg/m³	04/21/2017 8:08 PM
Surr: 4-Bromofluorobenzene	98.9	%Rec	D Limit	70-130	No M.W. Data		04/21/2017 8:08 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
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N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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TEL: (631) 694-3040 FAX: (631) 420-8436
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LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 4/19/2017 9:25:00 AM
Received : 4/20/2017 10:15:00 AM
Collected By CLIENT

Lab No. : 1704023-005
Client Sample ID: CELL 3

Sample Information:
Type :

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 40.0	ppbv	D	200	< 218	µg/m³	04/21/2017 10:29 PM
1,1,2,2-Tetrachloroethane	< 40.0	ppbv	D	200	< 275	µg/m³	04/21/2017 10:29 PM
1,1,2-Trichloroethane	< 20.0	ppbv	D	200	< 109	µg/m³	04/21/2017 10:29 PM
1,1-Dichloroethane	< 40.0	ppbv	D	200	< 162	µg/m³	04/21/2017 10:29 PM
1,1-Dichloroethene	< 40.0	ppbv	D	200	< 159	µg/m³	04/21/2017 10:29 PM
1,2-Dichloroethane	< 20.0	ppbv	D	200	< 80.9	µg/m³	04/21/2017 10:29 PM
1,2-Dichloroethene (trans)	< 40.0	ppbv	D	200	< 159	µg/m³	04/21/2017 10:29 PM
1,2-Dichloropropane	< 40.0	ppbv	D	200	< 185	µg/m³	04/21/2017 10:29 PM
1,3-Dichloropropene (cis)	< 40.0	ppbv	D	200	< 182	µg/m³	04/21/2017 10:29 PM
1,3-Dichloropropene (trans)	< 40.0	ppbv	D	200	< 182	µg/m³	04/21/2017 10:29 PM
Acetone	< 4,000	ppbv	D	200	< 9500	µg/m³	04/21/2017 10:29 PM
Benzene	5,090	ppbv	D	200	16300	µg/m³	04/21/2017 10:29 PM
Bromoform	< 40.0	ppbv	D	200	< 413	µg/m³	04/21/2017 10:29 PM
Carbon disulfide	< 40.0	ppbv	D	200	< 125	µg/m³	04/21/2017 10:29 PM
Carbon tetrachloride	< 20.0	ppbv	D	200	< 126	µg/m³	04/21/2017 10:29 PM
Chlorobenzene	< 40.0	ppbv	D	200	< 184	µg/m³	04/21/2017 10:29 PM
Chloroethane	< 40.0	ppbv	D	200	< 106	µg/m³	04/21/2017 10:29 PM
Chloroform	< 20.0	ppbv	D	200	< 97.7	µg/m³	04/21/2017 10:29 PM
Ethylbenzene	< 40.0	ppbv	D	200	< 174	µg/m³	04/21/2017 10:29 PM
Methyl butyl ketone	< 40.0	ppbv	D +	200	< 164	µg/m³	04/21/2017 10:29 PM
Methyl ethyl ketone	< 40.0	ppbv	D	200	< 118	µg/m³	04/21/2017 10:29 PM
Methyl isobutyl ketone	< 40.0	ppbv	D	200	< 164	µg/m³	04/21/2017 10:29 PM
Methylene chloride	< 200	ppbv	D	200	< 777	µg/m³	04/21/2017 10:29 PM
Tetrachloroethene	< 20.0	ppbv	D	200	< 136	µg/m³	04/21/2017 10:29 PM
Toluene	< 800	ppbv	D	200	< 3010	µg/m³	04/21/2017 10:29 PM
Trichloroethene	< 20.0	ppbv	D	200	< 107	µg/m³	04/21/2017 10:29 PM
Vinyl chloride	< 40.0	ppbv	D	200	< 102	µg/m³	04/21/2017 10:29 PM
Xylenes (m&p)	< 80.0	ppbv	D	200	< 347	µg/m³	04/21/2017 10:29 PM
Xylenes (o)	< 40.0	ppbv	D	200	< 174	µg/m³	04/21/2017 10:29 PM
Surr: 4-Bromofluorobenzene	91.2	%Rec	D	Limit 70-130	No M.W. Data		04/21/2017 10:29 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Date Reported : 4/26/2017

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1704023**

26-Apr-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107466**

Sample ID **VBLK042117** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107466**
Client ID: **PBW** Batch ID: **R107466** TestNo: **ETO-15** Analysis Date: **4/21/2017** SeqNo: **2392075**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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575 Broad Hollow Road
Melville, NY 11747
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QC SUMMARY REPORT

WO#: **1704023**

26-Apr-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107466**

Sample ID **VBLK042117** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107466**
Client ID: **PBW** Batch ID: **R107466** TestNo: **ETO-15** Analysis Date: **4/21/2017** SeqNo: **2392075**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	9.59		10.00		95.9	70	130				

Sample ID **LFB042117** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107466**
Client ID: **ZZZZZZ** Batch ID: **R107466** TestNo: **ETO-15** Analysis Date: **4/21/2017** SeqNo: **2392078**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	8.01	0.20	10.00	0	80.1	70	130				
Chloroethane	9.15	0.20	10.00	0	91.5	70	130				
Methylene chloride	7.98	0.20	10.00	0	79.8	70	130				
Acetone	9.17	0.20	10.00	0	91.7	70	130				
Carbon disulfide	8.84	0.20	10.00	0	88.4	70	130				
1,1-Dichloroethene	8.36	0.20	10.00	0	83.6	70	130				
1,1-Dichloroethane	8.61	0.20	10.00	0	86.1	70	130				
1,2-Dichloroethene (trans)	8.28	0.20	10.00	0	82.8	70	130				
Methyl ethyl ketone	8.54	0.20	10.00	0	85.4	70	130				
Chloroform	8.54	0.20	10.00	0	85.4	70	130				
1,2-Dichloroethane	9.04	0.20	10.00	0	90.4	70	130				
1,1,1-Trichloroethane	9.45	0.20	10.00	0	94.5	70	130				
Carbon tetrachloride	9.23	0.20	10.00	0	92.3	70	130				
1,2-Dichloropropane	8.32	0.20	10.00	0	83.2	70	130				
1,3-Dichloropropene (cis)	9.65	0.20	10.00	0	96.5	70	130				
Trichloroethene	8.89	0.20	10.00	0	88.9	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
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Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
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QC SUMMARY REPORT

WO#: **1704023**

26-Apr-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107466**

Sample ID **LFB042117** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107466**
Client ID: **ZZZZZZ** Batch ID: **R107466** TestNo: **ETO-15** Analysis Date: **4/21/2017** SeqNo: **2392078**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	8.39	0.20	10.00	0	83.9	70	130				
1,3-Dichloropropene (trans)	10.8	0.20	10.00	0	108	70	130				
1,1,2-Trichloroethane	8.67	0.20	10.00	0	86.7	70	130				
Bromoform	10.9	0.20	10.00	0	109	70	130				
Methyl isobutyl ketone	9.82	0.20	10.00	0	98.2	70	130				
Methyl butyl ketone	10.9	0.20	10.00	0	109	70	130				
Tetrachloroethene	9.16	0.20	10.00	0	91.6	70	130				
1,1,2,2-Tetrachloroethane	9.16	0.20	10.00	0	91.6	70	130				
Toluene	9.01	0.20	10.00	0	90.1	70	130				
Chlorobenzene	8.77	0.20	10.00	0	87.7	70	130				
Ethylbenzene	9.69	0.20	10.00	0	96.9	70	130				
Xylenes (m&p)	19.0	0.20	20.00	0	95.1	70	130				
Xylenes (o)	9.34	0.20	10.00	0	93.4	70	130				
Surr: 4-Bromofluorobenzene	9.90		10.00		99.0	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

Sample Receipt Checklist

Client Name **ENVIRO-MD** Date and Time Received: **4/20/2017 10:15:00 AM**

Work Order Number: **1704023** RcptNo: **1** Received by **Linda Siciliano**

Completed by: Reviewed by: Caitlin Panzarella

Completed Date: 4/20/2017 12:42:33 PM Reviewed Date: 4/20/2017 3:34:13 PM

Carrier name: FedEx

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐	NA	☐
Preservative added to bottles:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☐	No ☐	NA	☑
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☐	NA	☑
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	°
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☐	No ☑		
Airbill or Sticker?	Air Bil ☑	Sticker ☐	Not Present	☐
Airbill No:	725759805350			

Case Number: SDG: SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1704023

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

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

June 07, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: Monthly Air 5/26
Pace Project No.: 7019950

Dear James Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on May 30, 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.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Caitlin Panzarella

Caitlin Panzarella
caitlin.panzarella@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Josh Burke, Enviro Analytics Group

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Pace Analytical
www.pacelabs.com

WO#: 7019950
7019950
1705045

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

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

ENVIRO-MD

Section A Required Client Information:
Company: ENVIRO ANALYTICS GROUP
Address: 1430 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To: jcalendo@enviroanalyticsgroup.com
Phone: Fax:
Requested Due Date/TAT: STD

Section B Required Project Information:
Report To: Josh Burke
Copy To: James Calendo
Purchase Order No.:
Project Name:
Project Number:

Section C Invoice Information:
Attention: Laura Sargent
Company Name: Enviro Analytics Group
Address: 1650 Des Peres Rd, Suite 303, St. Louis, MO 63131
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other X

Location of Sampling by State: MD

Reporting Units: ug/m³ X mg/m³ X PPBV X PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other ___

Section D Required Client Information

AIR SAMPLE ID — Sample IDs MUST BE UNIQUE

Valid Media Codes: Tedlar Bag TB; 1 Liter Summa Can 1LC; 6 Liter Summa Can 6LC; Low Volume Puff LVP; High Volume Puff HVP; Other PM10

ITEM #	Sample ID	MEDIA CODE	PID Reading (Client only)	COLLECTED START DATE	START TIME	STOP DATE	STOP TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Canister Pressure (Initial Lab)	Canister Pressure (Final Lab)	Summa Can Number	Flow Control Number	PM10	3C- Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1	Cell 2 AST Off Gas	6LC		5-26-17	1135					30"		0120	QT1							X			001
2	Cell 2 SVE	↓		↓	1130					30"		3405	QT4							X			002
3	Cell 1				1055					30"		3426	QT11							X			003
4	Cell 3				1025					30"		16654	QT15							X			004
5	Cell 5 AST Off Gas				0945					30"		16657	QT18							X			005
6	Cell 5 INF				0950					30"		16706	QT19							X			006
7																							
8																							
9																							
10																							
11																							
12																							

Comments:

SPARROWS PT. MONTHLY

7325 2575 2340
2330
2329

7257 5980 5784

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] / EAG	5-26-17	1200	[signature]	5/30/17	1130

SAMPLE CONDITIONS: Temp in °C; Custody Sealed Cooler Y/N; Samples Intact Y/N

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jeff Wilson
SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 05/26/17

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 5/26/2017 11:35:00 AM
Received : 5/30/2017 11:30:00 AM
Collected By CLIENT

Lab No. : 1705045-001
Client Sample ID: CELL 5 AS OFF GAS

Should be Cell 2
AST Off Gas

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 60.0	ppbv	D	300	< 327	µg/m³	06/06/2017 6:43 AM
1,1,2,2-Tetrachloroethane	< 60.0	ppbv	D	300	< 412	µg/m³	06/06/2017 6:43 AM
1,1,2-Trichloroethane	< 30.0	ppbv	D	300	< 164	µg/m³	06/06/2017 6:43 AM
1,1-Dichloroethane	< 60.0	ppbv	D	300	< 243	µg/m³	06/06/2017 6:43 AM
1,1-Dichloroethene	< 60.0	ppbv	D	300	< 238	µg/m³	06/06/2017 6:43 AM
1,2-Dichloroethane	< 30.0	ppbv	D	300	< 121	µg/m³	06/06/2017 6:43 AM
1,2-Dichloroethene (trans)	< 60.0	ppbv	D	300	< 238	µg/m³	06/06/2017 6:43 AM
1,2-Dichloropropane	< 60.0	ppbv	D	300	< 277	µg/m³	06/06/2017 6:43 AM
1,3-Dichloropropene (cis)	< 60.0	ppbv	D	300	< 272	µg/m³	06/06/2017 6:43 AM
1,3-Dichloropropene (trans)	< 60.0	ppbv	D	300	< 272	µg/m³	06/06/2017 6:43 AM
Acetone	< 6,000	ppbv	D	300	< 14300	µg/m³	06/06/2017 6:43 AM
Benzene	233,000	ppbv	D	6351	744000	µg/m³	06/06/2017 8:33 AM
Bromoform	< 60.0	ppbv	D	300	< 620	µg/m³	06/06/2017 6:43 AM
Carbon disulfide	< 60.0	ppbv	D	300	< 187	µg/m³	06/06/2017 6:43 AM
Carbon tetrachloride	< 30.0	ppbv	D	300	< 189	µg/m³	06/06/2017 6:43 AM
Chlorobenzene	< 60.0	ppbv	D	300	< 276	µg/m³	06/06/2017 6:43 AM
Chloroethane	< 60.0	ppbv	D	300	< 158	µg/m³	06/06/2017 6:43 AM
Chloroform	< 30.0	ppbv	D	300	< 146	µg/m³	06/06/2017 6:43 AM
Ethylbenzene	424	ppbv	D	300	1840	µg/m³	06/06/2017 6:43 AM
Methyl butyl ketone	< 60.0	ppbv	D +	300	< 246	µg/m³	06/06/2017 6:43 AM
Methyl ethyl ketone	< 60.0	ppbv	D	300	< 177	µg/m³	06/06/2017 6:43 AM
Methyl isobutyl ketone	< 60.0	ppbv	D	300	< 246	µg/m³	06/06/2017 6:43 AM
Methylene chloride	< 300	ppbv	D	300	< 1160	µg/m³	06/06/2017 6:43 AM
Tetrachloroethene	< 30.0	ppbv	D	300	< 203	µg/m³	06/06/2017 6:43 AM
Toluene	27,600	ppbv	D	6351	104000	µg/m³	06/06/2017 8:33 AM
Trichloroethene	< 30.0	ppbv	D	300	< 161	µg/m³	06/06/2017 6:43 AM
Vinyl chloride	< 60.0	ppbv	D	300	< 153	µg/m³	06/06/2017 6:43 AM
Xylenes (m&p)	3,360	ppbv	D	300	14600	µg/m³	06/06/2017 6:43 AM
Xylenes (o)	1,040	ppbv	D	300	4500	µg/m³	06/06/2017 6:43 AM
Surr: 4-Bromofluorobenzene	94.7	%Rec	D	Limit 70-130	No M.W. Data		06/06/2017 6:43 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 6/7/2017

Pace Analytical
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TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 5/26/2017 11:30:00 AM
Received : 5/30/2017 11:30:00 AM
Collected By CLIENT

Lab No. : 1705045-002
Client Sample ID: CELL 2 SVE

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	06/05/2017 10:42 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	06/05/2017 10:42 AM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	06/05/2017 10:42 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	06/05/2017 10:42 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	06/05/2017 10:42 AM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	06/05/2017 10:42 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	06/05/2017 10:42 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	06/05/2017 10:42 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	06/05/2017 10:42 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	06/05/2017 10:42 AM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	06/05/2017 10:42 AM
Benzene	3.87	ppbv		1	12.4	µg/m³	06/05/2017 10:42 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	06/05/2017 10:42 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	06/05/2017 10:42 AM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	06/05/2017 10:42 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	06/05/2017 10:42 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	06/05/2017 10:42 AM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	06/05/2017 10:42 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	06/05/2017 10:42 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	06/05/2017 10:42 AM
Methyl ethyl ketone	< 0.20	ppbv		1	< 0.59	µg/m³	06/05/2017 10:42 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	06/05/2017 10:42 AM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	06/05/2017 10:42 AM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	06/05/2017 10:42 AM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	06/05/2017 10:42 AM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	06/05/2017 10:42 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	06/05/2017 10:42 AM
Xylenes (m&p)	< 0.40	ppbv		1	< 1.74	µg/m³	06/05/2017 10:42 AM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	06/05/2017 10:42 AM
Surr: 4-Bromofluorobenzene	102	%Rec	Limit	70-130	No M.W. Data		06/05/2017 10:42 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 6/7/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 5/26/2017 10:55:00 AM
Received : 5/30/2017 11:30:00 AM
Collected By CLIENT

Lab No. : 1705045-003
Client Sample ID: CELL 1

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 60.0	ppbv	D	300	< 327	µg/m³	06/06/2017 9:57 AM
1,1,2,2-Tetrachloroethane	< 60.0	ppbv	D	300	< 412	µg/m³	06/06/2017 9:57 AM
1,1,2-Trichloroethane	< 30.0	ppbv	D	300	< 164	µg/m³	06/06/2017 9:57 AM
1,1-Dichloroethane	< 60.0	ppbv	D	300	< 243	µg/m³	06/06/2017 9:57 AM
1,1-Dichloroethene	< 60.0	ppbv	D	300	< 238	µg/m³	06/06/2017 9:57 AM
1,2-Dichloroethane	< 30.0	ppbv	D	300	< 121	µg/m³	06/06/2017 9:57 AM
1,2-Dichloroethene (trans)	< 60.0	ppbv	D	300	< 238	µg/m³	06/06/2017 9:57 AM
1,2-Dichloropropane	< 60.0	ppbv	D	300	< 277	µg/m³	06/06/2017 9:57 AM
1,3-Dichloropropene (cis)	< 60.0	ppbv	D	300	< 272	µg/m³	06/06/2017 9:57 AM
1,3-Dichloropropene (trans)	< 60.0	ppbv	D	300	< 272	µg/m³	06/06/2017 9:57 AM
Acetone	< 6,000	ppbv	D	300	< 14300	µg/m³	06/06/2017 9:57 AM
Benzene	19,400	ppbv	D	1200	61900	µg/m³	06/06/2017 12:17 AM
Bromoform	< 60.0	ppbv	D	300	< 620	µg/m³	06/06/2017 9:57 AM
Carbon disulfide	< 60.0	ppbv	D	300	< 187	µg/m³	06/06/2017 9:57 AM
Carbon tetrachloride	< 30.0	ppbv	D	300	< 189	µg/m³	06/06/2017 9:57 AM
Chlorobenzene	< 60.0	ppbv	D	300	< 276	µg/m³	06/06/2017 9:57 AM
Chloroethane	< 60.0	ppbv	D	300	< 158	µg/m³	06/06/2017 9:57 AM
Chloroform	< 30.0	ppbv	D	300	< 146	µg/m³	06/06/2017 9:57 AM
Ethylbenzene	< 60.0	ppbv	D	300	< 261	µg/m³	06/06/2017 9:57 AM
Methyl butyl ketone	< 60.0	ppbv	D +	300	< 246	µg/m³	06/06/2017 9:57 AM
Methyl ethyl ketone	< 60.0	ppbv	D	300	< 177	µg/m³	06/06/2017 9:57 AM
Methyl isobutyl ketone	< 60.0	ppbv	D	300	< 246	µg/m³	06/06/2017 9:57 AM
Methylene chloride	< 300	ppbv	D	300	< 1160	µg/m³	06/06/2017 9:57 AM
Tetrachloroethene	< 30.0	ppbv	D	300	< 203	µg/m³	06/06/2017 9:57 AM
Toluene	< 1,200	ppbv	D	300	< 4520	µg/m³	06/06/2017 9:57 AM
Trichloroethene	< 30.0	ppbv	D	300	< 161	µg/m³	06/06/2017 9:57 AM
Vinyl chloride	< 60.0	ppbv	D	300	< 153	µg/m³	06/06/2017 9:57 AM
Xylenes (m&p)	311	ppbv	D	300	1350	µg/m³	06/06/2017 9:57 AM
Xylenes (o)	206	ppbv	D	300	893	µg/m³	06/06/2017 9:57 AM
Surr: 4-Bromofluorobenzene	95.5	%Rec	D Limit	70-130	No M.W. Data		06/06/2017 9:57 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 5/26/2017 10:25:00 AM
Received : 5/30/2017 11:30:00 AM
Collected By CLIENT

Lab No. : 1705045-004
Client Sample ID: CELL 3

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 20.0	ppbv	D	100	< 109	µg/m³	06/05/2017 2:53 PM
1,1,2,2-Tetrachloroethane	< 20.0	ppbv	D	100	< 137	µg/m³	06/05/2017 2:53 PM
1,1,2-Trichloroethane	< 10.0	ppbv	D	100	< 54.6	µg/m³	06/05/2017 2:53 PM
1,1-Dichloroethane	< 20.0	ppbv	D	100	< 80.9	µg/m³	06/05/2017 2:53 PM
1,1-Dichloroethene	< 20.0	ppbv	D	100	< 79.3	µg/m³	06/05/2017 2:53 PM
1,2-Dichloroethane	< 10.0	ppbv	D	100	< 40.5	µg/m³	06/05/2017 2:53 PM
1,2-Dichloroethene (trans)	< 20.0	ppbv	D	100	< 79.3	µg/m³	06/05/2017 2:53 PM
1,2-Dichloropropane	< 20.0	ppbv	D	100	< 92.4	µg/m³	06/05/2017 2:53 PM
1,3-Dichloropropene (cis)	< 20.0	ppbv	D	100	< 90.8	µg/m³	06/05/2017 2:53 PM
1,3-Dichloropropene (trans)	< 20.0	ppbv	D	100	< 90.8	µg/m³	06/05/2017 2:53 PM
Acetone	< 2,000	ppbv	D	100	< 4750	µg/m³	06/05/2017 2:53 PM
Benzene	7,090	ppbv	D	250	22700	µg/m³	06/05/2017 8:28 PM
Bromoform	< 20.0	ppbv	D	100	< 207	µg/m³	06/05/2017 2:53 PM
Carbon disulfide	< 20.0	ppbv	D	100	< 62.3	µg/m³	06/05/2017 2:53 PM
Carbon tetrachloride	< 10.0	ppbv	D	100	< 62.9	µg/m³	06/05/2017 2:53 PM
Chlorobenzene	< 20.0	ppbv	D	100	< 92.1	µg/m³	06/05/2017 2:53 PM
Chloroethane	< 20.0	ppbv	D	100	< 52.8	µg/m³	06/05/2017 2:53 PM
Chloroform	< 10.0	ppbv	D	100	< 48.8	µg/m³	06/05/2017 2:53 PM
Ethylbenzene	< 20.0	ppbv	D	100	< 86.9	µg/m³	06/05/2017 2:53 PM
Methyl butyl ketone	< 20.0	ppbv	D +	100	< 81.9	µg/m³	06/05/2017 2:53 PM
Methyl ethyl ketone	< 20.0	ppbv	D	100	< 59.0	µg/m³	06/05/2017 2:53 PM
Methyl isobutyl ketone	< 20.0	ppbv	D	100	< 82.0	µg/m³	06/05/2017 2:53 PM
Methylene chloride	< 100	ppbv	D	100	< 388	µg/m³	06/05/2017 2:53 PM
Tetrachloroethene	< 10.0	ppbv	D	100	< 67.8	µg/m³	06/05/2017 2:53 PM
Toluene	693	ppbv	D	100	2610	µg/m³	06/05/2017 2:53 PM
Trichloroethene	< 10.0	ppbv	D	100	< 53.7	µg/m³	06/05/2017 2:53 PM
Vinyl chloride	< 20.0	ppbv	D	100	< 51.1	µg/m³	06/05/2017 2:53 PM
Xylenes (m&p)	81.3	ppbv	D	100	353	µg/m³	06/05/2017 2:53 PM
Xylenes (o)	52.5	ppbv	D	100	228	µg/m³	06/05/2017 2:53 PM
Surr: 4-Bromofluorobenzene	98.0	%Rec	D	Limit 70-130	No M.W. Data		06/05/2017 2:53 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
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J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
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S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 5/26/2017 9:45:00 AM
Received : 5/30/2017 11:30:00 AM
Collected By CLIENT

Lab No. : 1705045-005
Client Sample ID: CELL 5 AST OFF GAS

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 1.00	ppbv	D	5	< 5.46	µg/m³	06/05/2017 1:18 PM
1,1,2,2-Tetrachloroethane	< 1.00	ppbv	D	5	< 6.87	µg/m³	06/05/2017 1:18 PM
1,1,2-Trichloroethane	< 0.50	ppbv	D	5	< 2.73	µg/m³	06/05/2017 1:18 PM
1,1-Dichloroethane	< 1.00	ppbv	D	5	< 4.05	µg/m³	06/05/2017 1:18 PM
1,1-Dichloroethene	< 1.00	ppbv	D	5	< 3.96	µg/m³	06/05/2017 1:18 PM
1,2-Dichloroethane	< 0.50	ppbv	D	5	< 2.02	µg/m³	06/05/2017 1:18 PM
1,2-Dichloroethene (trans)	< 1.00	ppbv	D	5	< 3.96	µg/m³	06/05/2017 1:18 PM
1,2-Dichloropropane	< 1.00	ppbv	D	5	< 4.62	µg/m³	06/05/2017 1:18 PM
1,3-Dichloropropene (cis)	< 1.00	ppbv	D	5	< 4.54	µg/m³	06/05/2017 1:18 PM
1,3-Dichloropropene (trans)	< 1.00	ppbv	D	5	< 4.54	µg/m³	06/05/2017 1:18 PM
Acetone	< 100	ppbv	D	5	< 238	µg/m³	06/05/2017 1:18 PM
Benzene	1,260	ppbv	D	40	4030	µg/m³	06/05/2017 2:19 PM
Bromoform	< 1.00	ppbv	D	5	< 10.3	µg/m³	06/05/2017 1:18 PM
Carbon disulfide	< 1.00	ppbv	D	5	< 3.11	µg/m³	06/05/2017 1:18 PM
Carbon tetrachloride	< 0.50	ppbv	D	5	< 3.15	µg/m³	06/05/2017 1:18 PM
Chlorobenzene	< 1.00	ppbv	D	5	< 4.60	µg/m³	06/05/2017 1:18 PM
Chloroethane	< 1.00	ppbv	D	5	< 2.64	µg/m³	06/05/2017 1:18 PM
Chloroform	< 0.50	ppbv	D	5	< 2.44	µg/m³	06/05/2017 1:18 PM
Ethylbenzene	35.9	ppbv	D	5	156	µg/m³	06/05/2017 1:18 PM
Methyl butyl ketone	< 1.00	ppbv	D +	5	< 4.10	µg/m³	06/05/2017 1:18 PM
Methyl ethyl ketone	3.02	ppbv	D	5	8.89	µg/m³	06/05/2017 1:18 PM
Methyl isobutyl ketone	< 1.00	ppbv	D	5	< 4.10	µg/m³	06/05/2017 1:18 PM
Methylene chloride	< 5.00	ppbv	D	5	< 19.4	µg/m³	06/05/2017 1:18 PM
Tetrachloroethene	< 0.50	ppbv	D	5	< 3.39	µg/m³	06/05/2017 1:18 PM
Toluene	874	ppbv	D	40	3290	µg/m³	06/05/2017 2:19 PM
Trichloroethene	< 0.50	ppbv	D	5	< 2.69	µg/m³	06/05/2017 1:18 PM
Vinyl chloride	< 1.00	ppbv	D	5	< 2.56	µg/m³	06/05/2017 1:18 PM
Xylenes (m&p)	312	ppbv	D	5	1350	µg/m³	06/05/2017 1:18 PM
Xylenes (o)	147	ppbv	D	5	638	µg/m³	06/05/2017 1:18 PM
Surr: 4-Bromofluorobenzene	101	%Rec	D Limit	70-130	No M.W. Data		06/05/2017 1:18 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 5/26/2017 9:50:00 AM
Received : 5/30/2017 11:30:00 AM
Collected By CLIENT

Lab No. : 1705045-006
Client Sample ID: CELL 5 INF

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	06/05/2017 11:23 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	06/05/2017 11:23 AM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	06/05/2017 11:23 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	06/05/2017 11:23 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	06/05/2017 11:23 AM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	06/05/2017 11:23 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	06/05/2017 11:23 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	06/05/2017 11:23 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	06/05/2017 11:23 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	06/05/2017 11:23 AM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	06/05/2017 11:23 AM
Benzene	0.72	ppbv		1	2.31	µg/m³	06/05/2017 11:23 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	06/05/2017 11:23 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	06/05/2017 11:23 AM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	06/05/2017 11:23 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	06/05/2017 11:23 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	06/05/2017 11:23 AM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	06/05/2017 11:23 AM
Ethylbenzene	0.42	ppbv		1	1.81	µg/m³	06/05/2017 11:23 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	06/05/2017 11:23 AM
Methyl ethyl ketone	< 0.20	ppbv		1	< 0.59	µg/m³	06/05/2017 11:23 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	06/05/2017 11:23 AM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	06/05/2017 11:23 AM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	06/05/2017 11:23 AM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	06/05/2017 11:23 AM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	06/05/2017 11:23 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	06/05/2017 11:23 AM
Xylenes (m&p)	4.81	ppbv		1	20.9	µg/m³	06/05/2017 11:23 AM
Xylenes (o)	2.05	ppbv		1	8.88	µg/m³	06/05/2017 11:23 AM
Surr: 4-Bromofluorobenzene	103	%Rec	Limit	70-130	No M.W. Data		06/05/2017 11:23 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
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r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
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Caitlin Panzarella
Project Manager : Caitlin Panzarella

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Date Reported : 6/7/2017

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1705045**

07-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107526**

Sample ID **VBLK060417** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107526**
Client ID: **PBW** Batch ID: **R107526** TestNo: **ETO-15** Analysis Date: **6/4/2017** SeqNo: **2393256**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1705045**

07-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107526**

Sample ID **VBLK060417** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107526**
Client ID: **PBW** Batch ID: **R107526** TestNo: **ETO-15** Analysis Date: **6/4/2017** SeqNo: **2393256**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	9.56		10.00		95.6	70	130				

Sample ID **LFB060417** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107526**
Client ID: **ZZZZZZ** Batch ID: **R107526** TestNo: **ETO-15** Analysis Date: **6/4/2017** SeqNo: **2393257**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	10.5	0.20	10.00	0	105	70	130				
Chloroethane	8.87	0.20	10.00	0	88.7	70	130				
Methylene chloride	9.57	0.20	10.00	0	95.7	70	130				
Acetone	12.0	0.20	10.00	0	120	70	130				
Carbon disulfide	9.95	0.20	10.00	0	99.5	70	130				
1,1-Dichloroethene	9.81	0.20	10.00	0	98.1	70	130				
1,1-Dichloroethane	10.1	0.20	10.00	0	101	70	130				
1,2-Dichloroethene (trans)	9.71	0.20	10.00	0	97.1	70	130				
Methyl ethyl ketone	10.4	0.20	10.00	0	104	70	130				
Chloroform	9.63	0.20	10.00	0	96.3	70	130				
1,2-Dichloroethane	9.77	0.20	10.00	0	97.7	70	130				
1,1,1-Trichloroethane	9.98	0.20	10.00	0	99.8	70	130				
Carbon tetrachloride	9.82	0.20	10.00	0	98.2	70	130				
1,2-Dichloropropane	10.1	0.20	10.00	0	101	70	130				
1,3-Dichloropropene (cis)	10.9	0.20	10.00	0	109	70	130				
Trichloroethene	10.2	0.20	10.00	0	102	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
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QC SUMMARY REPORT

WO#: **1705045**

07-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107526**

Sample ID **LFB060417** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107526**
Client ID: **ZZZZZZ** Batch ID: **R107526** TestNo: **ETO-15** Analysis Date: **6/4/2017** SeqNo: **2393257**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	10.1	0.20	10.00	0	101	70	130				
1,3-Dichloropropene (trans)	11.9	0.20	10.00	0	119	70	130				
1,1,2-Trichloroethane	10.0	0.20	10.00	0	100	70	130				
Bromoform	11.6	0.20	10.00	0	116	70	130				
Methyl isobutyl ketone	12.2	0.20	10.00	0	122	70	130				
Methyl butyl ketone	13.3	0.20	10.00	0	133	70	130				S
Tetrachloroethene	10.7	0.20	10.00	0	107	70	130				
1,1,2,2-Tetrachloroethane	11.3	0.20	10.00	0	113	70	130				
Toluene	11.1	0.20	10.00	0	111	70	130				
Chlorobenzene	10.6	0.20	10.00	0	106	70	130				
Ethylbenzene	11.5	0.20	10.00	0	115	70	130				
Xylenes (m&p)	22.4	0.20	20.00	0	112	70	130				
Xylenes (o)	11.0	0.20	10.00	0	110	70	130				
Surr: 4-Bromofluorobenzene	10.1		10.00		101	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
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S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1705045**

07-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107527**

Sample ID **VBLK060517** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107527**
Client ID: **PBW** Batch ID: **R107527** TestNo: **ETO-15** Analysis Date: **6/5/2017** SeqNo: **2393276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
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QC SUMMARY REPORT

WO#: **1705045**

07-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107527**

Sample ID **VBLK060517** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107527**
Client ID: **PBW** Batch ID: **R107527** TestNo: **ETO-15** Analysis Date: **6/5/2017** SeqNo: **2393276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	9.69		10.00		96.9	70	130				

Sample ID **LFB060517** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107527**
Client ID: **ZZZZZZ** Batch ID: **R107527** TestNo: **ETO-15** Analysis Date: **6/5/2017** SeqNo: **2393277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	8.68	0.20	10.00	0	86.8	70	130				
Chloroethane	11.0	0.20	10.00	0	110	70	130				
Methylene chloride	10.5	0.20	10.00	0	105	70	130				
Acetone	12.7	0.20	10.00	0	127	70	130				
Carbon disulfide	10.9	0.20	10.00	0	109	70	130				
1,1-Dichloroethene	10.5	0.20	10.00	0	105	70	130				
1,1-Dichloroethane	10.7	0.20	10.00	0	107	70	130				
1,2-Dichloroethene (trans)	10.1	0.20	10.00	0	101	70	130				
Methyl ethyl ketone	10.9	0.20	10.00	0	109	70	130				
Chloroform	9.71	0.20	10.00	0	97.1	70	130				
1,2-Dichloroethane	9.92	0.20	10.00	0	99.2	70	130				
1,1,1-Trichloroethane	9.93	0.20	10.00	0	99.3	70	130				
Carbon tetrachloride	9.53	0.20	10.00	0	95.3	70	130				
1,2-Dichloropropane	10.6	0.20	10.00	0	106	70	130				
1,3-Dichloropropene (cis)	11.3	0.20	10.00	0	113	70	130				
Trichloroethene	10.1	0.20	10.00	0	101	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
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QC SUMMARY REPORT

WO#: **1705045**

07-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107527**

Sample ID **LFB060517** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107527**
Client ID: **ZZZZZZ** Batch ID: **R107527** TestNo: **ETO-15** Analysis Date: **6/5/2017** SeqNo: **2393277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	10.4	0.20	10.00	0	104	70	130				
1,3-Dichloropropene (trans)	12.0	0.20	10.00	0	120	70	130				
1,1,2-Trichloroethane	10.0	0.20	10.00	0	100	70	130				
Bromoform	11.2	0.20	10.00	0	112	70	130				
Methyl isobutyl ketone	12.7	0.20	10.00	0	127	70	130				
Methyl butyl ketone	13.9	0.20	10.00	0	139	70	130				S
Tetrachloroethene	10.5	0.20	10.00	0	105	70	130				
1,1,2,2-Tetrachloroethane	11.3	0.20	10.00	0	113	70	130				
Toluene	11.2	0.20	10.00	0	112	70	130				
Chlorobenzene	10.6	0.20	10.00	0	106	70	130				
Ethylbenzene	11.7	0.20	10.00	0	117	70	130				
Xylenes (m&p)	22.4	0.20	20.00	0	112	70	130				
Xylenes (o)	11.0	0.20	10.00	0	110	70	130				
Surr: 4-Bromofluorobenzene	10.1		10.00		101	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
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S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
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Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

Sample Receipt Checklist

Client Name **ENVIRO-MD** Date and Time Received: **5/30/2017 11:30:00 AM**

Work Order Number: **1705045** RcptNo: **1** Received by **Linda Siciliano**

Completed by: Reviewed by: Caitlin Panzarella

Completed Date: 5/31/2017 9:08:34 AM Reviewed Date: 6/5/2017 3:01:51 PM

Carrier name: FedEx

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐	NA	☐
Preservative added to bottles:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☐	No ☐	NA	☑
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☐	NA	☑
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	°
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☐	No ☑		
Airbill or Sticker?	Air Bil ☑	Sticker ☐	Not Present	☐
Airbill No:	732525752340/2330/2329&727559805784			

Case Number: SDG: SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1705045

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

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

June 28, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: AIR (7)
Pace Project No.: 7022161

Dear James Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on June 21, 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.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Caitlin Panzarella

Caitlin Panzarella
caitlin.panzarella@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Josh Burke, Enviro Analytics Group

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AIR: CHAIN-OF ... ent

The Chain-of-Custody is a LEGAL ... VIRO-MD

WO#:7022161

1706029

7022161

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRO ANALYTICS GROUP	Report To: Josh Burkey	Attention: Laura Sargent
Address: 1430 Sparrows Point Blvd Sparrows Point, MD 21219	Copy To: James Calendar	Company Name: Enviro Analytics Group
Email To: James / Josh	Purchase Order No.:	Address: 1650 Des Peres Rd, Suite 303, St. Louis, MO 63131
Phone: Fax:	Project Name:	Pace Quote Reference:
Requested Due Date/TAT: STD	Project Number:	Pace Project Manager/Sales Rep.
		Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other X

Location of Sampling by State: MD

Reporting Units: ug/m³ X mg/m³ X PPBV X PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other ___

Method:

ITEM #	Section D Required Client Information — AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED START DATE	START TIME	STOP DATE	STOP TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Canister Pressure (Initial Lab)	Canister Pressure (Final Lab)	Summa Can Number	Flow Control Number	PM10	3C- Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1	Cell 5 AS Off Gas	6LC		6-19-17	1230			-30	0	30"		858	QT9								X		
2	Cell 5 INF	↓		↓	1235			↓	↓	30"		860	QT12								X		
3	Cell 6 Blower	↓		↓	1300			↓	↓	30"		3413	QT18								X		
4	Cell 6 VCV	↓		↓	1305			↓	↓	30"		3400	QT19								X		
5	Cell 1	↓		↓	1425			↓	↓	30"		3394	QT11								X		
6	Cell 2 AS Off Gas	↓		↓	1450			↓	↓	30"		3396	QT1								X		
7	Cell 3	↓		↓	1340			↓	↓	30"		0079	QT15								X		
8																							
9																							
10																							
11																							
12																							

Comments:

SPARROW PT MONTHLY

FED EX #7382 9575 8367

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] / EAG	6-19-17	1515	[signature]	6/21/17	1330

SAMPLE CONDITIONS

Temp in °C	Custody Sealed Cooler	Samples Intact
	Y/N	Y/N
	Y/N	Y/N
	Y/N	Y/N
	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeff Wilson

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM / DD / YY): 06/19/17

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 6/19/2017 12:30:00 PM
Received : 6/21/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1706029-001
Client Sample ID: CELL 5 AS OFF GAS

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 8.00	ppbv	D	40	< 43.7	µg/m³	06/28/2017 6:42 AM
1,1,2,2-Tetrachloroethane	< 8.00	ppbv	D	40	< 54.9	µg/m³	06/28/2017 6:42 AM
1,1,2-Trichloroethane	< 4.00	ppbv	D	40	< 21.8	µg/m³	06/28/2017 6:42 AM
1,1-Dichloroethane	< 8.00	ppbv	D	40	< 32.4	µg/m³	06/28/2017 6:42 AM
1,1-Dichloroethene	< 8.00	ppbv	D	40	< 31.7	µg/m³	06/28/2017 6:42 AM
1,2-Dichloroethane	< 4.00	ppbv	D	40	< 16.2	µg/m³	06/28/2017 6:42 AM
1,2-Dichloroethene (trans)	< 8.00	ppbv	D	40	< 31.7	µg/m³	06/28/2017 6:42 AM
1,2-Dichloropropane	< 8.00	ppbv	D	40	< 37.0	µg/m³	06/28/2017 6:42 AM
1,3-Dichloropropene (cis)	< 8.00	ppbv	D	40	< 36.3	µg/m³	06/28/2017 6:42 AM
1,3-Dichloropropene (trans)	< 8.00	ppbv	D	40	< 36.3	µg/m³	06/28/2017 6:42 AM
Acetone	< 800	ppbv	D	40	< 1900	µg/m³	06/28/2017 6:42 AM
Benzene	849	ppbv	D	40	2710	µg/m³	06/28/2017 6:42 AM
Bromoform	< 8.00	ppbv	D	40	< 82.7	µg/m³	06/28/2017 6:42 AM
Carbon disulfide	< 8.00	ppbv	D	40	< 24.9	µg/m³	06/28/2017 6:42 AM
Carbon tetrachloride	< 4.00	ppbv	D	40	< 25.2	µg/m³	06/28/2017 6:42 AM
Chlorobenzene	< 8.00	ppbv	D	40	< 36.8	µg/m³	06/28/2017 6:42 AM
Chloroethane	< 8.00	ppbv	D	40	< 21.1	µg/m³	06/28/2017 6:42 AM
Chloroform	< 4.00	ppbv	D	40	< 19.5	µg/m³	06/28/2017 6:42 AM
Ethylbenzene	33.9	ppbv	D	40	147	µg/m³	06/28/2017 6:42 AM
Methyl butyl ketone	< 8.00	ppbv	D +	40	< 32.8	µg/m³	06/28/2017 6:42 AM
Methyl ethyl ketone	< 8.00	ppbv	D	40	< 23.6	µg/m³	06/28/2017 6:42 AM
Methyl isobutyl ketone	< 8.00	ppbv	D	40	< 32.8	µg/m³	06/28/2017 6:42 AM
Methylene chloride	< 40.0	ppbv	D	40	< 155	µg/m³	06/28/2017 6:42 AM
Tetrachloroethene	< 4.00	ppbv	D	40	< 27.1	µg/m³	06/28/2017 6:42 AM
Toluene	616	ppbv	D	40	2320	µg/m³	06/28/2017 6:42 AM
Trichloroethene	< 4.00	ppbv	D	40	< 21.5	µg/m³	06/28/2017 6:42 AM
Vinyl chloride	< 8.00	ppbv	D	40	< 20.4	µg/m³	06/28/2017 6:42 AM
Xylenes (m&p)	512	ppbv	D	40	2230	µg/m³	06/28/2017 6:42 AM
Xylenes (o)	188	ppbv	D	40	816	µg/m³	06/28/2017 6:42 AM
Surr: 4-Bromofluorobenzene	102	%Rec	D	Limit 70-130	No M.W. Data		06/28/2017 6:42 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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Date Reported : 6/28/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 6/19/2017 12:35:00 PM
Received : 6/21/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1706029-002
Client Sample ID: CELL 5 INF

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	06/23/2017 9:19 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	06/23/2017 9:19 AM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	06/23/2017 9:19 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	06/23/2017 9:19 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	06/23/2017 9:19 AM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	06/23/2017 9:19 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	06/23/2017 9:19 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	06/23/2017 9:19 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	06/23/2017 9:19 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	06/23/2017 9:19 AM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	06/23/2017 9:19 AM
Benzene	2.72	ppbv		1	8.70	µg/m³	06/23/2017 9:19 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	06/23/2017 9:19 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	06/23/2017 9:19 AM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	06/23/2017 9:19 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	06/23/2017 9:19 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	06/23/2017 9:19 AM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	06/23/2017 9:19 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	06/23/2017 9:19 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	06/23/2017 9:19 AM
Methyl ethyl ketone	0.25	ppbv		1	0.72	µg/m³	06/23/2017 9:19 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	06/23/2017 9:19 AM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	06/23/2017 9:19 AM
Tetrachloroethene	0.25	ppbv		1	1.70	µg/m³	06/23/2017 9:19 AM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	06/23/2017 9:19 AM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	06/23/2017 9:19 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	06/23/2017 9:19 AM
Xylenes (m&p)	0.68	ppbv		1	2.95	µg/m³	06/23/2017 9:19 AM
Xylenes (o)	0.32	ppbv		1	1.39	µg/m³	06/23/2017 9:19 AM
Surr: 4-Bromofluorobenzene	101	%Rec	Limit	70-130	No M.W. Data		06/23/2017 9:19 AM

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Caitlin Panzarella
Project Manager : Caitlin Panzarella

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LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 6/19/2017 1:00:00 PM
Received : 6/21/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1706029-003
Client Sample ID: CELL 6 BLOWER

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 10.0	ppbv	D	50	< 54.6	µg/m³	06/28/2017 12:31 PM
1,1,2,2-Tetrachloroethane	< 10.0	ppbv	D	50	< 68.7	µg/m³	06/28/2017 12:31 PM
1,1,2-Trichloroethane	< 5.00	ppbv	D	50	< 27.3	µg/m³	06/28/2017 12:31 PM
1,1-Dichloroethane	< 10.0	ppbv	D	50	< 40.5	µg/m³	06/28/2017 12:31 PM
1,1-Dichloroethene	< 10.0	ppbv	D	50	< 39.6	µg/m³	06/28/2017 12:31 PM
1,2-Dichloroethane	< 5.00	ppbv	D	50	< 20.2	µg/m³	06/28/2017 12:31 PM
1,2-Dichloroethene (trans)	< 10.0	ppbv	D	50	< 39.6	µg/m³	06/28/2017 12:31 PM
1,2-Dichloropropane	< 10.0	ppbv	D	50	< 46.2	µg/m³	06/28/2017 12:31 PM
1,3-Dichloropropene (cis)	< 10.0	ppbv	D	50	< 45.4	µg/m³	06/28/2017 12:31 PM
1,3-Dichloropropene (trans)	< 10.0	ppbv	D	50	< 45.4	µg/m³	06/28/2017 12:31 PM
Acetone	< 1,000	ppbv	D	50	< 2380	µg/m³	06/28/2017 12:31 PM
Benzene	56,100	ppbv	D	2216	179000	µg/m³	06/28/2017 2:39 PM
Bromoform	< 10.0	ppbv	D	50	< 103	µg/m³	06/28/2017 12:31 PM
Carbon disulfide	< 10.0	ppbv	D	50	< 31.1	µg/m³	06/28/2017 12:31 PM
Carbon tetrachloride	< 5.00	ppbv	D	50	< 31.5	µg/m³	06/28/2017 12:31 PM
Chlorobenzene	< 10.0	ppbv	D	50	< 46.0	µg/m³	06/28/2017 12:31 PM
Chloroethane	< 10.0	ppbv	D	50	< 26.4	µg/m³	06/28/2017 12:31 PM
Chloroform	< 5.00	ppbv	D	50	< 24.4	µg/m³	06/28/2017 12:31 PM
Ethylbenzene	1,760	ppbv	D	50	7630	µg/m³	06/28/2017 12:31 PM
Methyl butyl ketone	< 10.0	ppbv	D +	50	< 41.0	µg/m³	06/28/2017 12:31 PM
Methyl ethyl ketone	< 10.0	ppbv	D	50	< 29.5	µg/m³	06/28/2017 12:31 PM
Methyl isobutyl ketone	< 10.0	ppbv	D	50	< 41.0	µg/m³	06/28/2017 12:31 PM
Methylene chloride	< 50.0	ppbv	D	50	< 194	µg/m³	06/28/2017 12:31 PM
Tetrachloroethene	< 5.00	ppbv	D	50	< 33.9	µg/m³	06/28/2017 12:31 PM
Toluene	49,200	ppbv	D	2216	185000	µg/m³	06/28/2017 2:39 PM
Trichloroethene	< 5.00	ppbv	D	50	< 26.9	µg/m³	06/28/2017 12:31 PM
Vinyl chloride	< 10.0	ppbv	D	50	< 25.6	µg/m³	06/28/2017 12:31 PM
Xylenes (m&p)	20,300	ppbv	D	2216	88300	µg/m³	06/28/2017 2:39 PM
Xylenes (o)	8,740	ppbv	D	2216	38000	µg/m³	06/28/2017 2:39 PM
Surr: 4-Bromofluorobenzene	114	%Rec	D Limit	70-130	No M.W. Data		06/28/2017 12:31 PM

Qualifiers: E = Value above quantitation range, Value estimated.
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Caitlin Panzarella
Project Manager : Caitlin Panzarella

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LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 6/19/2017 1:05:00 PM
Received : 6/21/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1706029-004
Client Sample ID: CELL 6 VCV

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	06/28/2017 11:50 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	06/28/2017 11:50 AM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	06/28/2017 11:50 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	06/28/2017 11:50 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	06/28/2017 11:50 AM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	06/28/2017 11:50 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	06/28/2017 11:50 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	06/28/2017 11:50 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	06/28/2017 11:50 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	06/28/2017 11:50 AM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	06/28/2017 11:50 AM
Benzene	11.2	ppbv		1	35.8	µg/m³	06/28/2017 11:50 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	06/28/2017 11:50 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	06/28/2017 11:50 AM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	06/28/2017 11:50 AM
Chlorobenzene	0.25	ppbv		1	1.15	µg/m³	06/28/2017 11:50 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	06/28/2017 11:50 AM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	06/28/2017 11:50 AM
Ethylbenzene	6.52	ppbv		1	28.3	µg/m³	06/28/2017 11:50 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	06/28/2017 11:50 AM
Methyl ethyl ketone	0.63	ppbv		1	1.87	µg/m³	06/28/2017 11:50 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	06/28/2017 11:50 AM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	06/28/2017 11:50 AM
Tetrachloroethene	0.86	ppbv		1	5.85	µg/m³	06/28/2017 11:50 AM
Toluene	22.3	ppbv		1	83.9	µg/m³	06/28/2017 11:50 AM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	06/28/2017 11:50 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	06/28/2017 11:50 AM
Xylenes (m&p)	41.9	ppbv		1	182	µg/m³	06/28/2017 11:50 AM
Xylenes (o)	26.2	ppbv		1	114	µg/m³	06/28/2017 11:50 AM
Surr: 4-Bromofluorobenzene	103	%Rec	Limit	70-130	No M.W. Data		06/28/2017 11:50 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 6/19/2017 2:25:00 PM
Received : 6/21/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1706029-005
Client Sample ID: CELL 1

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 8.00	ppbv	D	40	< 43.7	µg/m³	06/28/2017 9:08 AM
1,1,2,2-Tetrachloroethane	< 8.00	ppbv	D	40	< 54.9	µg/m³	06/28/2017 9:08 AM
1,1,2-Trichloroethane	< 4.00	ppbv	D	40	< 21.8	µg/m³	06/28/2017 9:08 AM
1,1-Dichloroethane	< 8.00	ppbv	D	40	< 32.4	µg/m³	06/28/2017 9:08 AM
1,1-Dichloroethene	< 8.00	ppbv	D	40	< 31.7	µg/m³	06/28/2017 9:08 AM
1,2-Dichloroethane	< 4.00	ppbv	D	40	< 16.2	µg/m³	06/28/2017 9:08 AM
1,2-Dichloroethene (trans)	< 8.00	ppbv	D	40	< 31.7	µg/m³	06/28/2017 9:08 AM
1,2-Dichloropropane	< 8.00	ppbv	D	40	< 37.0	µg/m³	06/28/2017 9:08 AM
1,3-Dichloropropene (cis)	< 8.00	ppbv	D	40	< 36.3	µg/m³	06/28/2017 9:08 AM
1,3-Dichloropropene (trans)	< 8.00	ppbv	D	40	< 36.3	µg/m³	06/28/2017 9:08 AM
Acetone	< 800	ppbv	D	40	< 1900	µg/m³	06/28/2017 9:08 AM
Benzene	17,300	ppbv	D	860	55300	µg/m³	06/28/2017 7:55 AM
Bromoform	< 8.00	ppbv	D	40	< 82.7	µg/m³	06/28/2017 9:08 AM
Carbon disulfide	< 8.00	ppbv	D	40	< 24.9	µg/m³	06/28/2017 9:08 AM
Carbon tetrachloride	< 4.00	ppbv	D	40	< 25.2	µg/m³	06/28/2017 9:08 AM
Chlorobenzene	< 8.00	ppbv	D	40	< 36.8	µg/m³	06/28/2017 9:08 AM
Chloroethane	< 8.00	ppbv	D	40	< 21.1	µg/m³	06/28/2017 9:08 AM
Chloroform	< 4.00	ppbv	D	40	< 19.5	µg/m³	06/28/2017 9:08 AM
Ethylbenzene	57.8	ppbv	D	40	251	µg/m³	06/28/2017 9:08 AM
Methyl butyl ketone	< 8.00	ppbv	D +	40	< 32.8	µg/m³	06/28/2017 9:08 AM
Methyl ethyl ketone	< 8.00	ppbv	D	40	< 23.6	µg/m³	06/28/2017 9:08 AM
Methyl isobutyl ketone	< 8.00	ppbv	D	40	< 32.8	µg/m³	06/28/2017 9:08 AM
Methylene chloride	< 40.0	ppbv	D	40	< 155	µg/m³	06/28/2017 9:08 AM
Tetrachloroethene	< 4.00	ppbv	D	40	< 27.1	µg/m³	06/28/2017 9:08 AM
Toluene	784	ppbv	D	40	2950	µg/m³	06/28/2017 9:08 AM
Trichloroethene	< 4.00	ppbv	D	40	< 21.5	µg/m³	06/28/2017 9:08 AM
Vinyl chloride	< 8.00	ppbv	D	40	< 20.4	µg/m³	06/28/2017 9:08 AM
Xylenes (m&p)	264	ppbv	D	40	1150	µg/m³	06/28/2017 9:08 AM
Xylenes (o)	119	ppbv	D	40	515	µg/m³	06/28/2017 9:08 AM
Surr: 4-Bromofluorobenzene	104	%Rec	D Limit	70-130	No M.W. Data		06/28/2017 9:08 AM

Qualifiers: E = Value above quantitation range, Value estimated.
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Project Manager : Caitlin Panzarella

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LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 6/19/2017 2:50:00 PM
Received : 6/21/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1706029-006
Client Sample ID: CELL 2 AS OFF GAS

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 8.00	ppbv	D	40	< 43.7	µg/m³	06/28/2017 9:45 AM
1,1,2,2-Tetrachloroethane	< 8.00	ppbv	D	40	< 54.9	µg/m³	06/28/2017 9:45 AM
1,1,2-Trichloroethane	< 4.00	ppbv	D	40	< 21.8	µg/m³	06/28/2017 9:45 AM
1,1-Dichloroethane	< 8.00	ppbv	D	40	< 32.4	µg/m³	06/28/2017 9:45 AM
1,1-Dichloroethene	< 8.00	ppbv	D	40	< 31.7	µg/m³	06/28/2017 9:45 AM
1,2-Dichloroethane	< 4.00	ppbv	D	40	< 16.2	µg/m³	06/28/2017 9:45 AM
1,2-Dichloroethene (trans)	< 8.00	ppbv	D	40	< 31.7	µg/m³	06/28/2017 9:45 AM
1,2-Dichloropropane	< 8.00	ppbv	D	40	< 37.0	µg/m³	06/28/2017 9:45 AM
1,3-Dichloropropene (cis)	< 8.00	ppbv	D	40	< 36.3	µg/m³	06/28/2017 9:45 AM
1,3-Dichloropropene (trans)	< 8.00	ppbv	D	40	< 36.3	µg/m³	06/28/2017 9:45 AM
Acetone	< 800	ppbv	D	40	< 1900	µg/m³	06/28/2017 9:45 AM
Benzene	7,140	ppbv	D	428	22800	µg/m³	06/28/2017 8:31 AM
Bromoform	< 8.00	ppbv	D	40	< 82.7	µg/m³	06/28/2017 9:45 AM
Carbon disulfide	< 8.00	ppbv	D	40	< 24.9	µg/m³	06/28/2017 9:45 AM
Carbon tetrachloride	< 4.00	ppbv	D	40	< 25.2	µg/m³	06/28/2017 9:45 AM
Chlorobenzene	< 8.00	ppbv	D	40	< 36.8	µg/m³	06/28/2017 9:45 AM
Chloroethane	< 8.00	ppbv	D	40	< 21.1	µg/m³	06/28/2017 9:45 AM
Chloroform	< 4.00	ppbv	D	40	< 19.5	µg/m³	06/28/2017 9:45 AM
Ethylbenzene	18.4	ppbv	D	40	79.9	µg/m³	06/28/2017 9:45 AM
Methyl butyl ketone	< 8.00	ppbv	D +	40	< 32.8	µg/m³	06/28/2017 9:45 AM
Methyl ethyl ketone	< 8.00	ppbv	D	40	< 23.6	µg/m³	06/28/2017 9:45 AM
Methyl isobutyl ketone	< 8.00	ppbv	D	40	< 32.8	µg/m³	06/28/2017 9:45 AM
Methylene chloride	< 40.0	ppbv	D	40	< 155	µg/m³	06/28/2017 9:45 AM
Tetrachloroethene	< 4.00	ppbv	D	40	< 27.1	µg/m³	06/28/2017 9:45 AM
Toluene	445	ppbv	D	40	1680	µg/m³	06/28/2017 9:45 AM
Trichloroethene	< 4.00	ppbv	D	40	< 21.5	µg/m³	06/28/2017 9:45 AM
Vinyl chloride	< 8.00	ppbv	D	40	< 20.4	µg/m³	06/28/2017 9:45 AM
Xylenes (m&p)	183	ppbv	D	40	796	µg/m³	06/28/2017 9:45 AM
Xylenes (o)	83.1	ppbv	D	40	361	µg/m³	06/28/2017 9:45 AM
Surr: 4-Bromofluorobenzene	102	%Rec	D Limit	70-130	No M.W. Data		06/28/2017 9:45 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 6/28/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 6/19/2017 1:40:00 PM
Received : 6/21/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1706029-007
Client Sample ID: CELL 3

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 10.0	ppbv	D	50	< 54.6	µg/m³	06/28/2017 7:19 AM
1,1,2,2-Tetrachloroethane	< 10.0	ppbv	D	50	< 68.7	µg/m³	06/28/2017 7:19 AM
1,1,2-Trichloroethane	< 5.00	ppbv	D	50	< 27.3	µg/m³	06/28/2017 7:19 AM
1,1-Dichloroethane	< 10.0	ppbv	D	50	< 40.5	µg/m³	06/28/2017 7:19 AM
1,1-Dichloroethene	< 10.0	ppbv	D	50	< 39.6	µg/m³	06/28/2017 7:19 AM
1,2-Dichloroethane	< 5.00	ppbv	D	50	< 20.2	µg/m³	06/28/2017 7:19 AM
1,2-Dichloroethene (trans)	< 10.0	ppbv	D	50	< 39.6	µg/m³	06/28/2017 7:19 AM
1,2-Dichloropropane	< 10.0	ppbv	D	50	< 46.2	µg/m³	06/28/2017 7:19 AM
1,3-Dichloropropene (cis)	< 10.0	ppbv	D	50	< 45.4	µg/m³	06/28/2017 7:19 AM
1,3-Dichloropropene (trans)	< 10.0	ppbv	D	50	< 45.4	µg/m³	06/28/2017 7:19 AM
Acetone	< 1,000	ppbv	D	50	< 2380	µg/m³	06/28/2017 7:19 AM
Benzene	1,720	ppbv	D	50	5510	µg/m³	06/28/2017 7:19 AM
Bromoform	< 10.0	ppbv	D	50	< 103	µg/m³	06/28/2017 7:19 AM
Carbon disulfide	< 10.0	ppbv	D	50	< 31.1	µg/m³	06/28/2017 7:19 AM
Carbon tetrachloride	< 5.00	ppbv	D	50	< 31.5	µg/m³	06/28/2017 7:19 AM
Chlorobenzene	< 10.0	ppbv	D	50	< 46.0	µg/m³	06/28/2017 7:19 AM
Chloroethane	< 10.0	ppbv	D	50	< 26.4	µg/m³	06/28/2017 7:19 AM
Chloroform	< 5.00	ppbv	D	50	< 24.4	µg/m³	06/28/2017 7:19 AM
Ethylbenzene	< 10.0	ppbv	D	50	< 43.4	µg/m³	06/28/2017 7:19 AM
Methyl butyl ketone	< 10.0	ppbv	D +	50	< 41.0	µg/m³	06/28/2017 7:19 AM
Methyl ethyl ketone	< 10.0	ppbv	D	50	< 29.5	µg/m³	06/28/2017 7:19 AM
Methyl isobutyl ketone	< 10.0	ppbv	D	50	< 41.0	µg/m³	06/28/2017 7:19 AM
Methylene chloride	< 50.0	ppbv	D	50	< 194	µg/m³	06/28/2017 7:19 AM
Tetrachloroethene	< 5.00	ppbv	D	50	< 33.9	µg/m³	06/28/2017 7:19 AM
Toluene	246	ppbv	D	50	926	µg/m³	06/28/2017 7:19 AM
Trichloroethene	< 5.00	ppbv	D	50	< 26.9	µg/m³	06/28/2017 7:19 AM
Vinyl chloride	< 10.0	ppbv	D	50	< 25.6	µg/m³	06/28/2017 7:19 AM
Xylenes (m&p)	45.8	ppbv	D	50	199	µg/m³	06/28/2017 7:19 AM
Xylenes (o)	29.0	ppbv	D	50	126	µg/m³	06/28/2017 7:19 AM
Surr: 4-Bromofluorobenzene	101	%Rec	D	Limit 70-130	No M.W. Data		06/28/2017 7:19 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 6/28/2017

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1706029**

28-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107548**

Sample ID **VBLK062717** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107548**
Client ID: **PBW** Batch ID: **R107548** TestNo: **ETO-15** Analysis Date: **6/27/2017** SeqNo: **2393491**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 1.00	1.00									
Acetone	< 20.0	20.0									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.10	0.10									
1,2-Dichloroethane	< 0.10	0.10									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.10	0.10									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.10	0.10									
Benzene	< 0.10	0.10									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.10	0.10									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.10	0.10									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 4.00	4.00									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1706029**

28-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107548**

Sample ID **VBLK062717** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107548**
Client ID: **PBW** Batch ID: **R107548** TestNo: **ETO-15** Analysis Date: **6/27/2017** SeqNo: **2393491**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.40	0.40									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	10.0		10.00		100	70	130				

Sample ID **LFB062717** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107548**
Client ID: **ZZZZZZ** Batch ID: **R107548** TestNo: **ETO-15** Analysis Date: **6/28/2017** SeqNo: **2393492**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	10.7	0.20	10.00	0	107	70	130				
Chloroethane	13.9	0.20	10.00	0	139	70	130				S
Methylene chloride	10.1	1.00	10.00	0	101	70	130				
Acetone	< 20.0	20.0	10.00	0	99.4	70	130				
Carbon disulfide	10.3	0.20	10.00	0	103	70	130				
1,1-Dichloroethene	9.82	0.20	10.00	0	98.2	70	130				
1,1-Dichloroethane	10.2	0.20	10.00	0	102	70	130				
1,2-Dichloroethene (trans)	9.74	0.20	10.00	0	97.4	70	130				
Methyl ethyl ketone	9.57	0.20	10.00	0	95.7	70	130				
Chloroform	9.90	0.10	10.00	0	99.0	70	130				
1,2-Dichloroethane	10.5	0.10	10.00	0	105	70	130				
1,1,1-Trichloroethane	11.5	0.20	10.00	0	115	70	130				
Carbon tetrachloride	10.9	0.10	10.00	0	109	70	130				
1,2-Dichloropropane	9.49	0.20	10.00	0	94.9	70	130				
1,3-Dichloropropene (cis)	11.0	0.20	10.00	0	110	70	130				
Trichloroethene	10.1	0.10	10.00	0	101	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1706029**

28-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107548**

Sample ID **LFB062717** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107548**
Client ID: **ZZZZZZ** Batch ID: **R107548** TestNo: **ETO-15** Analysis Date: **6/28/2017** SeqNo: **2393492**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	9.60	0.10	10.00	0	96.0	70	130				
1,3-Dichloropropene (trans)	11.8	0.20	10.00	0	118	70	130				
1,1,2-Trichloroethane	9.24	0.10	10.00	0	92.4	70	130				
Bromoform	12.9	0.20	10.00	0	129	70	130				
Methyl isobutyl ketone	11.7	0.20	10.00	0	117	70	130				
Methyl butyl ketone	12.2	0.20	10.00	0	122	70	130				
Tetrachloroethene	11.7	0.10	10.00	0	117	70	130				
1,1,2,2-Tetrachloroethane	9.30	0.20	10.00	0	93.0	70	130				
Toluene	10.5	4.00	10.00	0	105	70	130				
Chlorobenzene	9.81	0.20	10.00	0	98.1	70	130				
Ethylbenzene	11.0	0.20	10.00	0	110	70	130				
Xylenes (m&p)	21.5	0.40	20.00	0	107	70	130				
Xylenes (o)	10.4	0.20	10.00	0	104	70	130				
Surr: 4-Bromofluorobenzene	10.2		10.00		102	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
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Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1706029**

28-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107549**

Sample ID **VBLK062217** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107549**
Client ID: **PBW** Batch ID: **R107549** TestNo: **ETO-15** Analysis Date: **6/22/2017** SeqNo: **2393505**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1706029**

28-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107549**

Sample ID **VBLK062217** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107549**
Client ID: **PBW** Batch ID: **R107549** TestNo: **ETO-15** Analysis Date: **6/22/2017** SeqNo: **2393505**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	9.65		10.00		96.5	70	130				

Sample ID **LFB062217** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107549**
Client ID: **ZZZZZZ** Batch ID: **R107549** TestNo: **ETO-15** Analysis Date: **6/22/2017** SeqNo: **2393506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	9.71	0.20	10.00	0	97.1	70	130				
Chloroethane	12.6	0.20	10.00	0	126	70	130				
Methylene chloride	8.76	0.20	10.00	0	87.6	70	130				
Acetone	8.91	0.20	10.00	0	89.1	70	130				
Carbon disulfide	9.60	0.20	10.00	0	96.0	70	130				
1,1-Dichloroethene	9.18	0.20	10.00	0	91.8	70	130				
1,1-Dichloroethane	9.17	0.20	10.00	0	91.7	70	130				
1,2-Dichloroethene (trans)	8.81	0.20	10.00	0	88.1	70	130				
Methyl ethyl ketone	8.51	0.20	10.00	0	85.1	70	130				
Chloroform	8.88	0.20	10.00	0	88.8	70	130				
1,2-Dichloroethane	9.23	0.20	10.00	0	92.3	70	130				
1,1,1-Trichloroethane	10.0	0.20	10.00	0	100	70	130				
Carbon tetrachloride	9.93	0.20	10.00	0	99.3	70	130				
1,2-Dichloropropane	8.87	0.20	10.00	0	88.7	70	130				
1,3-Dichloropropene (cis)	10.1	0.20	10.00	0	101	70	130				
Trichloroethene	9.79	0.20	10.00	0	97.9	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
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Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1706029**

28-Jun-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107549**

Sample ID **LFB062217** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107549**
Client ID: **ZZZZZZ** Batch ID: **R107549** TestNo: **ETO-15** Analysis Date: **6/22/2017** SeqNo: **2393506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	8.90	0.20	10.00	0	89.0	70	130				
1,3-Dichloropropene (trans)	11.3	0.20	10.00	0	113	70	130				
1,1,2-Trichloroethane	9.05	0.20	10.00	0	90.5	70	130				
Bromoform	12.6	0.20	10.00	0	126	70	130				
Methyl isobutyl ketone	9.40	0.20	10.00	0	94.0	70	130				
Methyl butyl ketone	9.70	0.20	10.00	0	97.0	70	130				
Tetrachloroethene	11.1	0.20	10.00	0	111	70	130				
1,1,2,2-Tetrachloroethane	9.89	0.20	10.00	0	98.9	70	130				
Toluene	9.96	0.20	10.00	0	99.6	70	130				
Chlorobenzene	9.67	0.20	10.00	0	96.7	70	130				
Ethylbenzene	10.6	0.20	10.00	0	106	70	130				
Xylenes (m&p)	20.8	0.20	20.00	0	104	70	130				
Xylenes (o)	10.3	0.20	10.00	0	103	70	130				
Surr: 4-Bromofluorobenzene	9.91		10.00		99.1	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

Sample Receipt Checklist

Client Name **ENVIRO-MD** Date and Time Received: **6/21/2017 1:30:00 PM**

Work Order Number: **1706029** RcptNo: **1** Received by **Jaclyn Kuri**

Completed by: Jaclyn Kuri Reviewed by: Caitlin Panzarella

Completed Date: 6/22/2017 4:43:26 PM Reviewed Date: 6/26/2017 5:34:01 PM

Carrier name: FedEx

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐	NA	☐
Preservative added to bottles:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA	☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA	☐
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	°
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☐	No ☑		
Airbill or Sticker?	Air Bil ☑	Sticker ☐	Not Present	☐
Airbill No:	7382 9575 8367			

Case Number: SDG: SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1706029

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

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

July 28, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: Monthly Air 7/21
Pace Project No.: 7024969

Dear James Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on July 21, 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.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Caitlin Panzarella

Caitlin Panzarella
caitlin.panzarella@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Josh Burke, Enviro Analytics Group

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WO#: 7024969

7024969

1707014

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

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

ENVIRO-MD

Page: 1 of 1

Section A Required Client Information:

Company: ENVIRO ANALYTICS GROUP

Address:

Email To: jwilson@enviroanalyticsgroup.com

Phone: Fax:

Requested Due Date/TAT: STD

Section B Required Project Information:

Report To: Jeff Wilson

Copy To: James Calenda

Purchase Order No.:

Project Name:

Project Number:

Section C Invoice Information:

Attention: Laura Sargent

Company Name: Enviro Analytics Group

Address: 1650 Des Peres Rd, Suite 303, St. Louis, MO 63131

Pace Quote Reference:

Pace Project Manager/Sales Rep.

Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other X

Location of Sampling by State: MD

Reporting Units: ug/m³ X mg/m³ X PPBV X PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other_____

ITEM #	Section D Required Client Information: AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED STOP DATE	COLLECTED STOP TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Canister Pressure (Initial Lab)	Canister Pressure (Final Lab)	Summa Can Number	Flow Control Number	PM10	3C-Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1	Cell 1	6LC		7-18-17	1325			30	0	30"		8847	QT1							X			01
2	Cell 3	↓		↓	1250			↓	↓	30"		1628	QT3							X			2
3	Cell 6 Oxidizer	↓		↓	1400			↓	↓	30"		1633	QT8							X			3
4	Cell 6 Blower	↓		↓	1405			↓	↓	30"		3393	QT9							X			4
5	Cell 5 INF	↓		↓	1215			↓	↓	30"		3403	QT10							X			5
6	Cell 5 AST Off Gas	↓		↓	1210			↓	↓	30"		3420	QT11							X			6
7	Cell 2 AST	↓		↓	1445			↓	↓	30"		16689	QT12							X			7
8	Cell 2 SVE	↓		↓	1440			↓	↓	30"		16707	QT14							X			8
9																							
10																							
11																							
12																							

Valid Media Codes: Tedlar Bag TB; 1 Liter Summa Can 1LC; 6 Liter Summa Can 6LC; Low Volume Puff LVP; High Volume Puff HVP; Other PM10

Comments:

SPARROWS PT MONTHLY

TRK# 7382 9576 2256

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Jeff Wilson / EAG	7-18-17	1505	[illegible]	7/21/17	11:45

SAMPLE CONDITIONS: Temp in °C; Custody Sealed Cooler Y/N; Samples Intact Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeff Wilson

SIGNATURE of SAMPLER: Jeff Wilson

DATE Signed (MM / DD / YY): 07/18/17

575 BROAD HOLLOW ROAD, MELVILLE, NY 11747 Air Technical Phone: 631.694.3040

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 7/18/2017 1:25:00 PM
Received : 7/21/2017 11:45:00 AM
Collected By CLIENT

Lab No. : 1707014-001
Client Sample ID: CELL 1

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 10.0	ppbv	D	50	< 54.6	µg/m³	07/26/2017 1:45 PM
1,1,2,2-Tetrachloroethane	< 10.0	ppbv	D	50	< 68.7	µg/m³	07/26/2017 1:45 PM
1,1,2-Trichloroethane	< 5.00	ppbv	D	50	< 27.3	µg/m³	07/26/2017 1:45 PM
1,1-Dichloroethane	< 10.0	ppbv	D	50	< 40.5	µg/m³	07/26/2017 1:45 PM
1,1-Dichloroethene	< 10.0	ppbv	D	50	< 39.6	µg/m³	07/26/2017 1:45 PM
1,2-Dichloroethane	< 5.00	ppbv	D	50	< 20.2	µg/m³	07/26/2017 1:45 PM
1,2-Dichloroethene (trans)	< 10.0	ppbv	D	50	< 39.6	µg/m³	07/26/2017 1:45 PM
1,2-Dichloropropane	< 10.0	ppbv	D	50	< 46.2	µg/m³	07/26/2017 1:45 PM
1,3-Dichloropropene (cis)	< 10.0	ppbv	D	50	< 45.4	µg/m³	07/26/2017 1:45 PM
1,3-Dichloropropene (trans)	< 10.0	ppbv	D	50	< 45.4	µg/m³	07/26/2017 1:45 PM
Acetone	< 1,000	ppbv	D	50	< 2380	µg/m³	07/26/2017 1:45 PM
Benzene	14,300	ppbv	D	375	45600	µg/m³	07/27/2017 8:01 PM
Bromoform	< 10.0	ppbv	D	50	< 103	µg/m³	07/26/2017 1:45 PM
Carbon disulfide	< 10.0	ppbv	D	50	< 31.1	µg/m³	07/26/2017 1:45 PM
Carbon tetrachloride	< 5.00	ppbv	D	50	< 31.5	µg/m³	07/26/2017 1:45 PM
Chlorobenzene	< 10.0	ppbv	D	50	< 46.0	µg/m³	07/26/2017 1:45 PM
Chloroethane	< 10.0	ppbv	D	50	< 26.4	µg/m³	07/26/2017 1:45 PM
Chloroform	< 5.00	ppbv	D	50	< 24.4	µg/m³	07/26/2017 1:45 PM
Ethylbenzene	49.7	ppbv	D	50	216	µg/m³	07/26/2017 1:45 PM
Methyl butyl ketone	< 10.0	ppbv	D +	50	< 41.0	µg/m³	07/26/2017 1:45 PM
Methyl ethyl ketone	< 10.0	ppbv	D	50	< 29.5	µg/m³	07/26/2017 1:45 PM
Methyl isobutyl ketone	< 10.0	ppbv	D	50	< 41.0	µg/m³	07/26/2017 1:45 PM
Methylene chloride	< 50.0	ppbv	D	50	< 194	µg/m³	07/26/2017 1:45 PM
Tetrachloroethene	< 5.00	ppbv	D	50	< 33.9	µg/m³	07/26/2017 1:45 PM
Toluene	277	ppbv	D	50	1040	µg/m³	07/26/2017 1:45 PM
Trichloroethene	< 5.00	ppbv	D	50	< 26.9	µg/m³	07/26/2017 1:45 PM
Vinyl chloride	< 10.0	ppbv	D	50	< 25.6	µg/m³	07/26/2017 1:45 PM
Xylenes (m&p)	245	ppbv	D	50	1070	µg/m³	07/26/2017 1:45 PM
Xylenes (o)	99.0	ppbv	D	50	430	µg/m³	07/26/2017 1:45 PM
Surr: 4-Bromofluorobenzene	111	%Rec	D	Limit 70-130	No M.W. Data		07/26/2017 1:45 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 7/28/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 7/18/2017 12:50:00 PM
Received : 7/21/2017 11:45:00 AM
Collected By CLIENT

Lab No. : 1707014-002
Client Sample ID: CELL 3

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 8.00	ppbv	D	40	< 43.7	µg/m³	07/26/2017 11:45 AM
1,1,2,2-Tetrachloroethane	< 8.00	ppbv	D	40	< 54.9	µg/m³	07/26/2017 11:45 AM
1,1,2-Trichloroethane	< 4.00	ppbv	D	40	< 21.8	µg/m³	07/26/2017 11:45 AM
1,1-Dichloroethane	< 8.00	ppbv	D	40	< 32.4	µg/m³	07/26/2017 11:45 AM
1,1-Dichloroethene	< 8.00	ppbv	D	40	< 31.7	µg/m³	07/26/2017 11:45 AM
1,2-Dichloroethane	< 4.00	ppbv	D	40	< 16.2	µg/m³	07/26/2017 11:45 AM
1,2-Dichloroethene (trans)	< 8.00	ppbv	D	40	< 31.7	µg/m³	07/26/2017 11:45 AM
1,2-Dichloropropane	< 8.00	ppbv	D	40	< 37.0	µg/m³	07/26/2017 11:45 AM
1,3-Dichloropropene (cis)	< 8.00	ppbv	D	40	< 36.3	µg/m³	07/26/2017 11:45 AM
1,3-Dichloropropene (trans)	< 8.00	ppbv	D	40	< 36.3	µg/m³	07/26/2017 11:45 AM
Acetone	< 800	ppbv	D	40	< 1900	µg/m³	07/26/2017 11:45 AM
Benzene	2,350	ppbv	D	80	7520	µg/m³	07/26/2017 12:25 PM
Bromoform	< 8.00	ppbv	D	40	< 82.7	µg/m³	07/26/2017 11:45 AM
Carbon disulfide	< 8.00	ppbv	D	40	< 24.9	µg/m³	07/26/2017 11:45 AM
Carbon tetrachloride	< 4.00	ppbv	D	40	< 25.2	µg/m³	07/26/2017 11:45 AM
Chlorobenzene	< 8.00	ppbv	D	40	< 36.8	µg/m³	07/26/2017 11:45 AM
Chloroethane	< 8.00	ppbv	D	40	< 21.1	µg/m³	07/26/2017 11:45 AM
Chloroform	< 4.00	ppbv	D	40	< 19.5	µg/m³	07/26/2017 11:45 AM
Ethylbenzene	< 8.00	ppbv	D	40	< 34.7	µg/m³	07/26/2017 11:45 AM
Methyl butyl ketone	< 8.00	ppbv	D +	40	< 32.8	µg/m³	07/26/2017 11:45 AM
Methyl ethyl ketone	< 8.00	ppbv	D	40	< 23.6	µg/m³	07/26/2017 11:45 AM
Methyl isobutyl ketone	< 8.00	ppbv	D	40	< 32.8	µg/m³	07/26/2017 11:45 AM
Methylene chloride	< 40.0	ppbv	D	40	< 155	µg/m³	07/26/2017 11:45 AM
Tetrachloroethene	< 4.00	ppbv	D	40	< 27.1	µg/m³	07/26/2017 11:45 AM
Toluene	324	ppbv	D	40	1220	µg/m³	07/26/2017 11:45 AM
Trichloroethene	< 4.00	ppbv	D	40	< 21.5	µg/m³	07/26/2017 11:45 AM
Vinyl chloride	< 8.00	ppbv	D	40	< 20.4	µg/m³	07/26/2017 11:45 AM
Xylenes (m&p)	36.8	ppbv	D	40	160	µg/m³	07/26/2017 11:45 AM
Xylenes (o)	25.7	ppbv	D	40	112	µg/m³	07/26/2017 11:45 AM
Surr: 4-Bromofluorobenzene	111	%Rec	D	Limit 70-130	No M.W. Data		07/26/2017 11:45 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 7/28/2017

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TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 7/18/2017 2:00:00 PM
Received : 7/21/2017 11:45:00 AM
Collected By CLIENT

Lab No. : 1707014-003
Client Sample ID: CELL 6 OXIDIZER

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	07/27/2017 11:03 PM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	07/27/2017 11:03 PM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	07/27/2017 11:03 PM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	07/27/2017 11:03 PM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	07/27/2017 11:03 PM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	07/27/2017 11:03 PM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	07/27/2017 11:03 PM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	07/27/2017 11:03 PM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	07/27/2017 11:03 PM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	07/27/2017 11:03 PM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	07/27/2017 11:03 PM
Benzene	33.3	ppbv		1	106	µg/m³	07/27/2017 11:03 PM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	07/27/2017 11:03 PM
Carbon disulfide	0.73	ppbv		1	2.28	µg/m³	07/27/2017 11:03 PM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	07/27/2017 11:03 PM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	07/27/2017 11:03 PM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	07/27/2017 11:03 PM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	07/27/2017 11:03 PM
Ethylbenzene	0.60	ppbv		1	2.62	µg/m³	07/27/2017 11:03 PM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	07/27/2017 11:03 PM
Methyl ethyl ketone	0.43	ppbv		1	1.28	µg/m³	07/27/2017 11:03 PM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	07/27/2017 11:03 PM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	07/27/2017 11:03 PM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	07/27/2017 11:03 PM
Toluene	8.72	ppbv		1	32.9	µg/m³	07/27/2017 11:03 PM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	07/27/2017 11:03 PM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	07/27/2017 11:03 PM
Xylenes (m&p)	3.43	ppbv		1	14.9	µg/m³	07/27/2017 11:03 PM
Xylenes (o)	1.17	ppbv		1	5.07	µg/m³	07/27/2017 11:03 PM
Surr: 4-Bromofluorobenzene	115	%Rec	Limit	70-130	No M.W. Data		07/27/2017 11:03 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
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r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 7/28/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 7/18/2017 2:05:00 PM
Received : 7/21/2017 11:45:00 AM
Collected By CLIENT

Lab No. : 1707014-004
Client Sample ID: CELL 6 BLOWER

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 160	ppbv	D	800	< 873	µg/m³	07/27/2017 8:36 PM
1,1,2,2-Tetrachloroethane	< 160	ppbv	D	800	< 1100	µg/m³	07/27/2017 8:36 PM
1,1,2-Trichloroethane	< 80.0	ppbv	D	800	< 437	µg/m³	07/27/2017 8:36 PM
1,1-Dichloroethane	< 160	ppbv	D	800	< 648	µg/m³	07/27/2017 8:36 PM
1,1-Dichloroethene	< 160	ppbv	D	800	< 634	µg/m³	07/27/2017 8:36 PM
1,2-Dichloroethane	< 80.0	ppbv	D	800	< 324	µg/m³	07/27/2017 8:36 PM
1,2-Dichloroethene (trans)	< 160	ppbv	D	800	< 634	µg/m³	07/27/2017 8:36 PM
1,2-Dichloropropane	< 160	ppbv	D	800	< 739	µg/m³	07/27/2017 8:36 PM
1,3-Dichloropropene (cis)	< 160	ppbv	D	800	< 726	µg/m³	07/27/2017 8:36 PM
1,3-Dichloropropene (trans)	< 160	ppbv	D	800	< 726	µg/m³	07/27/2017 8:36 PM
Acetone	< 16,000	ppbv	D	800	< 38000	µg/m³	07/27/2017 8:36 PM
Benzene	63,800	ppbv	D	4000	204000	µg/m³	07/27/2017 10:19 PM
Bromoform	< 160	ppbv	D	800	< 1650	µg/m³	07/27/2017 8:36 PM
Carbon disulfide	< 160	ppbv	D	800	< 498	µg/m³	07/27/2017 8:36 PM
Carbon tetrachloride	< 80.0	ppbv	D	800	< 503	µg/m³	07/27/2017 8:36 PM
Chlorobenzene	< 160	ppbv	D	800	< 737	µg/m³	07/27/2017 8:36 PM
Chloroethane	< 160	ppbv	D	800	< 422	µg/m³	07/27/2017 8:36 PM
Chloroform	< 80.0	ppbv	D	800	< 391	µg/m³	07/27/2017 8:36 PM
Ethylbenzene	1,340	ppbv	D	800	5810	µg/m³	07/27/2017 8:36 PM
Methyl butyl ketone	< 160	ppbv	D +	800	< 655	µg/m³	07/27/2017 8:36 PM
Methyl ethyl ketone	< 160	ppbv	D	800	< 472	µg/m³	07/27/2017 8:36 PM
Methyl isobutyl ketone	< 160	ppbv	D	800	< 656	µg/m³	07/27/2017 8:36 PM
Methylene chloride	< 800	ppbv	D	800	< 3110	µg/m³	07/27/2017 8:36 PM
Tetrachloroethene	< 80.0	ppbv	D	800	< 543	µg/m³	07/27/2017 8:36 PM
Toluene	20,100	ppbv	D	800	75700	µg/m³	07/27/2017 8:36 PM
Trichloroethene	< 80.0	ppbv	D	800	< 430	µg/m³	07/27/2017 8:36 PM
Vinyl chloride	< 160	ppbv	D	800	< 409	µg/m³	07/27/2017 8:36 PM
Xylenes (m&p)	7,040	ppbv	D	800	30600	µg/m³	07/27/2017 8:36 PM
Xylenes (o)	2,320	ppbv	D	800	10100	µg/m³	07/27/2017 8:36 PM
Surr: 4-Bromofluorobenzene	114	%Rec	D	Limit 70-130	No M.W. Data		07/27/2017 8:36 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 7/28/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 7/18/2017 12:15:00 PM
Received : 7/21/2017 11:45:00 AM
Collected By CLIENT

Lab No. : 1707014-005
Client Sample ID: CELL 5 INF

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	07/26/2017 12:39 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	07/26/2017 12:39 AM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	07/26/2017 12:39 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	07/26/2017 12:39 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	07/26/2017 12:39 AM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	07/26/2017 12:39 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	07/26/2017 12:39 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	07/26/2017 12:39 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	07/26/2017 12:39 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	07/26/2017 12:39 AM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	07/26/2017 12:39 AM
Benzene	10.6	ppbv		1	33.8	µg/m³	07/26/2017 12:39 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	07/26/2017 12:39 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	07/26/2017 12:39 AM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	07/26/2017 12:39 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	07/26/2017 12:39 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	07/26/2017 12:39 AM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	07/26/2017 12:39 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	07/26/2017 12:39 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	07/26/2017 12:39 AM
Methyl ethyl ketone	0.35	ppbv		1	1.04	µg/m³	07/26/2017 12:39 AM
Methyl isobutyl ketone	0.26	ppbv		1	1.07	µg/m³	07/26/2017 12:39 AM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	07/26/2017 12:39 AM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	07/26/2017 12:39 AM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	07/26/2017 12:39 AM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	07/26/2017 12:39 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	07/26/2017 12:39 AM
Xylenes (m&p)	< 0.40	ppbv		1	< 1.74	µg/m³	07/26/2017 12:39 AM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	07/26/2017 12:39 AM
Surr: 4-Bromofluorobenzene	113	%Rec	Limit	70-130	No M.W. Data		07/26/2017 12:39 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
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P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 7/18/2017 12:10:00 PM
Received : 7/21/2017 11:45:00 AM
Collected By CLIENT

Lab No. : 1707014-006
Client Sample ID: CELL 5 AST OFF GAS

Sample Information:
Type : Air
Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 5.00	ppbv	D	25	< 27.3	µg/m³	07/27/2017 6:03 PM
1,1,2,2-Tetrachloroethane	< 5.00	ppbv	D	25	< 34.3	µg/m³	07/27/2017 6:03 PM
1,1,2-Trichloroethane	< 2.50	ppbv	D	25	< 13.6	µg/m³	07/27/2017 6:03 PM
1,1-Dichloroethane	< 5.00	ppbv	D	25	< 20.2	µg/m³	07/27/2017 6:03 PM
1,1-Dichloroethene	< 5.00	ppbv	D	25	< 19.8	µg/m³	07/27/2017 6:03 PM
1,2-Dichloroethane	< 2.50	ppbv	D	25	< 10.1	µg/m³	07/27/2017 6:03 PM
1,2-Dichloroethene (trans)	< 5.00	ppbv	D	25	< 19.8	µg/m³	07/27/2017 6:03 PM
1,2-Dichloropropane	< 5.00	ppbv	D	25	< 23.1	µg/m³	07/27/2017 6:03 PM
1,3-Dichloropropene (cis)	< 5.00	ppbv	D	25	< 22.7	µg/m³	07/27/2017 6:03 PM
1,3-Dichloropropene (trans)	< 5.00	ppbv	D	25	< 22.7	µg/m³	07/27/2017 6:03 PM
Acetone	< 500	ppbv	D	25	< 1190	µg/m³	07/27/2017 6:03 PM
Benzene	926	ppbv	D	25	2960	µg/m³	07/27/2017 6:03 PM
Bromoform	< 5.00	ppbv	D	25	< 51.7	µg/m³	07/27/2017 6:03 PM
Carbon disulfide	< 5.00	ppbv	D	25	< 15.6	µg/m³	07/27/2017 6:03 PM
Carbon tetrachloride	< 2.50	ppbv	D	25	< 15.7	µg/m³	07/27/2017 6:03 PM
Chlorobenzene	< 5.00	ppbv	D	25	< 23.0	µg/m³	07/27/2017 6:03 PM
Chloroethane	< 5.00	ppbv	D	25	< 13.2	µg/m³	07/27/2017 6:03 PM
Chloroform	< 2.50	ppbv	D	25	< 12.2	µg/m³	07/27/2017 6:03 PM
Ethylbenzene	29.4	ppbv	D	25	128	µg/m³	07/27/2017 6:03 PM
Methyl butyl ketone	< 5.00	ppbv	D +	25	< 20.5	µg/m³	07/27/2017 6:03 PM
Methyl ethyl ketone	6.78	ppbv	D	25	20.0	µg/m³	07/27/2017 6:03 PM
Methyl isobutyl ketone	< 5.00	ppbv	D	25	< 20.5	µg/m³	07/27/2017 6:03 PM
Methylene chloride	< 25.0	ppbv	D	25	< 97.1	µg/m³	07/27/2017 6:03 PM
Tetrachloroethene	< 2.50	ppbv	D	25	< 17.0	µg/m³	07/27/2017 6:03 PM
Toluene	578	ppbv	D	25	2180	µg/m³	07/27/2017 6:03 PM
Trichloroethene	< 2.50	ppbv	D	25	< 13.4	µg/m³	07/27/2017 6:03 PM
Vinyl chloride	< 5.00	ppbv	D	25	< 12.8	µg/m³	07/27/2017 6:03 PM
Xylenes (m&p)	399	ppbv	D	25	1730	µg/m³	07/27/2017 6:03 PM
Xylenes (o)	139	ppbv	D	25	605	µg/m³	07/27/2017 6:03 PM
Surr: 4-Bromofluorobenzene	114	%Rec	D Limit	70-130	No M.W. Data		07/27/2017 6:03 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
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P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 7/18/2017 2:45:00 PM
Received : 7/21/2017 11:45:00 AM
Collected By CLIENT

Lab No. : 1707014-007
Client Sample ID: CELL 2 AST

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 160	ppbv	D	800	< 873	µg/m³	07/27/2017 9:45 PM
1,1,2,2-Tetrachloroethane	< 160	ppbv	D	800	< 1100	µg/m³	07/27/2017 9:45 PM
1,1,2-Trichloroethane	< 80.0	ppbv	D	800	< 437	µg/m³	07/27/2017 9:45 PM
1,1-Dichloroethane	< 160	ppbv	D	800	< 648	µg/m³	07/27/2017 9:45 PM
1,1-Dichloroethene	< 160	ppbv	D	800	< 634	µg/m³	07/27/2017 9:45 PM
1,2-Dichloroethane	< 80.0	ppbv	D	800	< 324	µg/m³	07/27/2017 9:45 PM
1,2-Dichloroethene (trans)	< 160	ppbv	D	800	< 634	µg/m³	07/27/2017 9:45 PM
1,2-Dichloropropane	< 160	ppbv	D	800	< 739	µg/m³	07/27/2017 9:45 PM
1,3-Dichloropropene (cis)	< 160	ppbv	D	800	< 726	µg/m³	07/27/2017 9:45 PM
1,3-Dichloropropene (trans)	< 160	ppbv	D	800	< 726	µg/m³	07/27/2017 9:45 PM
Acetone	< 16,000	ppbv	D	800	< 38000	µg/m³	07/27/2017 9:45 PM
Benzene	95,000	ppbv	D	3200	303000	µg/m³	07/28/2017 9:47 AM
Bromoform	< 160	ppbv	D	800	< 1650	µg/m³	07/27/2017 9:45 PM
Carbon disulfide	< 160	ppbv	D	800	< 498	µg/m³	07/27/2017 9:45 PM
Carbon tetrachloride	< 80.0	ppbv	D	800	< 503	µg/m³	07/27/2017 9:45 PM
Chlorobenzene	< 160	ppbv	D	800	< 737	µg/m³	07/27/2017 9:45 PM
Chloroethane	< 160	ppbv	D	800	< 422	µg/m³	07/27/2017 9:45 PM
Chloroform	< 80.0	ppbv	D	800	< 391	µg/m³	07/27/2017 9:45 PM
Ethylbenzene	< 160	ppbv	D	800	< 695	µg/m³	07/27/2017 9:45 PM
Methyl butyl ketone	< 160	ppbv	D +	800	< 655	µg/m³	07/27/2017 9:45 PM
Methyl ethyl ketone	< 160	ppbv	D	800	< 472	µg/m³	07/27/2017 9:45 PM
Methyl isobutyl ketone	< 160	ppbv	D	800	< 656	µg/m³	07/27/2017 9:45 PM
Methylene chloride	< 800	ppbv	D	800	< 3110	µg/m³	07/27/2017 9:45 PM
Tetrachloroethene	< 80.0	ppbv	D	800	< 543	µg/m³	07/27/2017 9:45 PM
Toluene	8,660	ppbv	D	800	32600	µg/m³	07/27/2017 9:45 PM
Trichloroethene	< 80.0	ppbv	D	800	< 430	µg/m³	07/27/2017 9:45 PM
Vinyl chloride	< 160	ppbv	D	800	< 409	µg/m³	07/27/2017 9:45 PM
Xylenes (m&p)	818	ppbv	D	800	3550	µg/m³	07/27/2017 9:45 PM
Xylenes (o)	220	ppbv	D	800	956	µg/m³	07/27/2017 9:45 PM
Surr: 4-Bromofluorobenzene	110	%Rec	D Limit	70-130	No M.W. Data		07/27/2017 9:45 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 7/18/2017 2:40:00 PM
Received : 7/21/2017 11:45:00 AM
Collected By CLIENT

Lab No. : 1707014-008
Client Sample ID: CELL 2 SVE

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	07/25/2017 11:59 PM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	07/25/2017 11:59 PM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	07/25/2017 11:59 PM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	07/25/2017 11:59 PM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	07/25/2017 11:59 PM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	07/25/2017 11:59 PM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	07/25/2017 11:59 PM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	07/25/2017 11:59 PM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	07/25/2017 11:59 PM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	07/25/2017 11:59 PM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	07/25/2017 11:59 PM
Benzene	6.76	ppbv		1	21.6	µg/m³	07/25/2017 11:59 PM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	07/25/2017 11:59 PM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	07/25/2017 11:59 PM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	07/25/2017 11:59 PM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	07/25/2017 11:59 PM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	07/25/2017 11:59 PM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	07/25/2017 11:59 PM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	07/25/2017 11:59 PM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	07/25/2017 11:59 PM
Methyl ethyl ketone	0.43	ppbv		1	1.26	µg/m³	07/25/2017 11:59 PM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	07/25/2017 11:59 PM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	07/25/2017 11:59 PM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	07/25/2017 11:59 PM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	07/25/2017 11:59 PM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	07/25/2017 11:59 PM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	07/25/2017 11:59 PM
Xylenes (m&p)	0.51	ppbv		1	2.20	µg/m³	07/25/2017 11:59 PM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	07/25/2017 11:59 PM
Surr: 4-Bromofluorobenzene	111	%Rec	Limit	70-130	No M.W. Data		07/25/2017 11:59 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Date Reported : 7/28/2017

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1707014**

28-Jul-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107575**

Sample ID **VBLK072517** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107575**
Client ID: **PBW** Batch ID: **R107575** TestNo: **ETO-15** Analysis Date: **7/25/2017** SeqNo: **2393942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1707014**
28-Jul-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107575**

Sample ID **VBLK072517** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107575**
Client ID: **PBW** Batch ID: **R107575** TestNo: **ETO-15** Analysis Date: **7/25/2017** SeqNo: **2393942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	11.0		10.00		110	70	130				

Sample ID **LFB072517** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107575**
Client ID: **ZZZZZZ** Batch ID: **R107575** TestNo: **ETO-15** Analysis Date: **7/25/2017** SeqNo: **2393943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	11.3	0.20	10.00	0	113	70	130				
Chloroethane	7.02	0.20	10.00	0	70.2	70	130				
Methylene chloride	10.2	0.20	10.00	0	102	70	130				
Acetone	12.5	0.20	10.00	0	125	70	130				
Carbon disulfide	11.4	0.20	10.00	0	114	70	130				
1,1-Dichloroethene	9.14	0.20	10.00	0	91.4	70	130				
1,1-Dichloroethane	10.7	0.20	10.00	0	107	70	130				
1,2-Dichloroethene (trans)	9.12	0.20	10.00	0	91.2	70	130				
Methyl ethyl ketone	10.1	0.20	10.00	0	101	70	130				
Chloroform	9.82	0.20	10.00	0	98.2	70	130				
1,2-Dichloroethane	11.2	0.20	10.00	0	112	70	130				
1,1,1-Trichloroethane	9.99	0.20	10.00	0	99.9	70	130				
Carbon tetrachloride	9.11	0.20	10.00	0	91.1	70	130				
1,2-Dichloropropane	9.59	0.20	10.00	0	95.9	70	130				
1,3-Dichloropropene (cis)	10.8	0.20	10.00	0	108	70	130				
Trichloroethene	8.21	0.20	10.00	0	82.1	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
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Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1707014**
28-Jul-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107575**

Sample ID **LFB072517** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107575**
Client ID: **ZZZZZZ** Batch ID: **R107575** TestNo: **ETO-15** Analysis Date: **7/25/2017** SeqNo: **2393943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	9.48	0.20	10.00	0	94.8	70	130				
1,3-Dichloropropene (trans)	11.9	0.20	10.00	0	119	70	130				
1,1,2-Trichloroethane	8.58	0.20	10.00	0	85.8	70	130				
Bromoform	8.83	0.20	10.00	0	88.3	70	130				
Methyl isobutyl ketone	11.1	0.20	10.00	0	111	70	130				
Methyl butyl ketone	11.4	0.20	10.00	0	114	70	130				
Tetrachloroethene	7.94	0.20	10.00	0	79.4	70	130				
1,1,2,2-Tetrachloroethane	9.01	0.20	10.00	0	90.1	70	130				
Toluene	9.70	0.20	10.00	0	97.0	70	130				
Chlorobenzene	8.52	0.20	10.00	0	85.2	70	130				
Ethylbenzene	10.3	0.20	10.00	0	103	70	130				
Xylenes (m&p)	20.0	0.20	20.00	0	100	70	130				
Xylenes (o)	9.67	0.20	10.00	0	96.7	70	130				
Surr: 4-Bromofluorobenzene	11.2		10.00		112	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1707014**

28-Jul-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107577**

Sample ID **VBLK072717** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107577**
Client ID: **PBW** Batch ID: **R107577** TestNo: **ETO-15** Analysis Date: **7/27/2017** SeqNo: **2393958**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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Melville, NY 11747
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QC SUMMARY REPORT

WO#: **1707014**
28-Jul-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107577**

Sample ID **VBLK072717** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107577**
Client ID: **PBW** Batch ID: **R107577** TestNo: **ETO-15** Analysis Date: **7/27/2017** SeqNo: **2393958**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	11.1		10.00		111	70	130				

Sample ID **LFB072717** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107577**
Client ID: **ZZZZZZ** Batch ID: **R107577** TestNo: **ETO-15** Analysis Date: **7/27/2017** SeqNo: **2393959**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	13.5	0.20	10.00	0	135	70	130				S
Chloroethane	16.0	0.20	10.00	0	160	70	130				S
Methylene chloride	12.0	0.20	10.00	0	120	70	130				
Acetone	12.2	0.20	10.00	0	122	70	130				
Carbon disulfide	12.6	0.20	10.00	0	126	70	130				
1,1-Dichloroethene	11.5	0.20	10.00	0	115	70	130				
1,1-Dichloroethane	12.5	0.20	10.00	0	125	70	130				
1,2-Dichloroethene (trans)	11.2	0.20	10.00	0	112	70	130				
Methyl ethyl ketone	10.7	0.20	10.00	0	107	70	130				
Chloroform	11.6	0.20	10.00	0	116	70	130				
1,2-Dichloroethane	12.8	0.20	10.00	0	128	70	130				
1,1,1-Trichloroethane	12.2	0.20	10.00	0	122	70	130				
Carbon tetrachloride	10.7	0.20	10.00	0	107	70	130				
1,2-Dichloropropane	10.8	0.20	10.00	0	108	70	130				
1,3-Dichloropropene (cis)	12.4	0.20	10.00	0	124	70	130				
Trichloroethene	9.35	0.20	10.00	0	93.5	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1707014**

28-Jul-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107577**

Sample ID **LFB072717** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107577**
Client ID: **ZZZZZZ** Batch ID: **R107577** TestNo: **ETO-15** Analysis Date: **7/27/2017** SeqNo: **2393959**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	10.9	0.20	10.00	0	109	70	130				
1,3-Dichloropropene (trans)	13.2	0.20	10.00	0	132	70	130				S
1,1,2-Trichloroethane	9.85	0.20	10.00	0	98.5	70	130				
Bromoform	9.76	0.20	10.00	0	97.6	70	130				
Methyl isobutyl ketone	12.8	0.20	10.00	0	128	70	130				
Methyl butyl ketone	13.3	0.20	10.00	0	133	70	130				S
Tetrachloroethene	9.47	0.20	10.00	0	94.7	70	130				
1,1,2,2-Tetrachloroethane	10.7	0.20	10.00	0	107	70	130				
Toluene	11.6	0.20	10.00	0	116	70	130				
Chlorobenzene	10.1	0.20	10.00	0	101	70	130				
Ethylbenzene	12.2	0.20	10.00	0	122	70	130				
Xylenes (m&p)	23.6	0.20	20.00	0	118	70	130				
Xylenes (o)	11.4	0.20	10.00	0	114	70	130				
Surr: 4-Bromofluorobenzene	11.6		10.00		116	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

Sample Receipt Checklist

Client Name **ENVIRO-MD** Date and Time Received: **7/21/2017 11:45:00 AM**

Work Order Number: **1707014** RcptNo: **1** Received by **Jaclyn Kuri**

Completed by: Reviewed by: Caitlin Panzarella

Completed Date: 7/21/2017 6:41:18 PM Reviewed Date: 7/24/2017 6:08:21 PM

Carrier name: FedEx

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐	NA	☐
Preservative added to bottles:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☐	No ☐	NA	☑
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☐	NA	☑
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	°
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☐	No ☑		
Airbill or Sticker?	Air Bil ☑	Sticker ☐	Not Present	☐
Airbill No:	738295762256			

Case Number: SDG: SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1707014

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

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

September 11, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: SPARROWS PT-MONTHLY
Pace Project No.: 7028789

Dear James Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on September 01, 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.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Caitlin Panzarella

Caitlin Panzarella
caitlin.panzarella@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Josh Burke, Enviro Analytics Group

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AIR ... quest Document

The Chain ... accurately.

WO#: 7028789
7028789
709003

ENVIRO-MD

Page: 1 of 1

Section A Required Client Information:

Company: ENVIRO ANALYTICS GROUP
Address: 1430 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To: jwilson@enviroanalyticsgroup.com
Phone: Fax:
Requested Due Date/TAT: STD

Section B Required Project Information:

Report To: Jeff Wilson
Copy To: James Calanda
Purchase Order No.:
Project Name:
Project Number:

Section C Invoice Information:

Attention: Laura Sargent
Company Name: Enviro Analytics Group
Address: 1650 Des Peres Rd, Suite 303, St. Louis, MO 63131
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other X

Location of Sampling by State: MD

Reporting Units: ug/m³ X mg/m³ X PPBV X PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other_____

Section D Required Client Information

Valid Media Codes: MEDIA / CODE — Tedlar Bag TB; 1 Liter Summa Can 1LC; 6 Liter Summa Can 6LC; Low Volume Puff LVP; High Volume Puff HVP; Other PM10

ITEM #	AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED START DATE (COMPOSITE START END/GRAB)	COLLECTED START TIME	COLLECTED STOP DATE (COMPOSITE -)	COLLECTED STOP TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Canister Pressure (Initial Lab)	Canister Pressure (Final Lab)	Summa Can Number	Flow Control Number	Method: PM10	3C- Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1	Cell 5 INF			8-31-17	1235			-30	0	30"		16705	QT1							X			
2	Cell 5 AST				1230					30"		16706	QT2							X			
3	~~30" 1621 QT3~~																						
4	~~30" 1631 QT4~~																						
5	Cell 2 AST				0945					30"		1611	QT7							X			
6	Cell 2 SVE				0950					30"		1627	QT8							X			
7	Cell 1				0925					30"		1624	QT9							X			
8	Cell 3				0900					30"		1626	QT10							X			
9																							
10																							
11																							
12																							

Comments:

SPARROWS PT - MONTHLY

7457 4556 4400

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] / EAG	8/31/17	1300	[signature]	9/1/17	13:30

SAMPLE CONDITIONS: Temp in °C; Custody Sealed Cooler Y/N; Samples Intact Y/N

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jeff Wilson
SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY) 08/31/17

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 8/31/2017 12:35:00 PM
Received : 9/1/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1709003-001
Client Sample ID: CELL 5 INF

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	09/08/2017 1:39 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	09/08/2017 1:39 AM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	09/08/2017 1:39 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	09/08/2017 1:39 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	09/08/2017 1:39 AM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	09/08/2017 1:39 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	09/08/2017 1:39 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	09/08/2017 1:39 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	09/08/2017 1:39 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	09/08/2017 1:39 AM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	09/08/2017 1:39 AM
Benzene	0.66	ppbv		1	2.12	µg/m³	09/08/2017 1:39 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	09/08/2017 1:39 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	09/08/2017 1:39 AM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	09/08/2017 1:39 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	09/08/2017 1:39 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	09/08/2017 1:39 AM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	09/08/2017 1:39 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	09/08/2017 1:39 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	09/08/2017 1:39 AM
Methyl ethyl ketone	0.62	ppbv		1	1.83	µg/m³	09/08/2017 1:39 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	09/08/2017 1:39 AM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	09/08/2017 1:39 AM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	09/08/2017 1:39 AM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	09/08/2017 1:39 AM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	09/08/2017 1:39 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	09/08/2017 1:39 AM
Xylenes (m&p)	< 0.40	ppbv		1	< 1.74	µg/m³	09/08/2017 1:39 AM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	09/08/2017 1:39 AM
Surr: 4-Bromofluorobenzene	98.3	%Rec	Limit	70-130	No M.W. Data		09/08/2017 1:39 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 9/11/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 8/31/2017 12:30:00 PM
Received : 9/1/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1709003-002
Client Sample ID: CELL 5 AST

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 4.00	ppbv	D	20	< 21.8	µg/m³	09/08/2017 8:41 AM
1,1,2,2-Tetrachloroethane	< 4.00	ppbv	D	20	< 27.5	µg/m³	09/08/2017 8:41 AM
1,1,2-Trichloroethane	< 2.00	ppbv	D	20	< 10.9	µg/m³	09/08/2017 8:41 AM
1,1-Dichloroethane	< 4.00	ppbv	D	20	< 16.2	µg/m³	09/08/2017 8:41 AM
1,1-Dichloroethene	< 4.00	ppbv	D	20	< 15.9	µg/m³	09/08/2017 8:41 AM
1,2-Dichloroethane	< 2.00	ppbv	D	20	< 8.09	µg/m³	09/08/2017 8:41 AM
1,2-Dichloroethene (trans)	< 4.00	ppbv	D	20	< 15.9	µg/m³	09/08/2017 8:41 AM
1,2-Dichloropropane	< 4.00	ppbv	D	20	< 18.5	µg/m³	09/08/2017 8:41 AM
1,3-Dichloropropene (cis)	< 4.00	ppbv	D	20	< 18.2	µg/m³	09/08/2017 8:41 AM
1,3-Dichloropropene (trans)	< 4.00	ppbv	D	20	< 18.2	µg/m³	09/08/2017 8:41 AM
Acetone	< 400	ppbv	D	20	< 950	µg/m³	09/08/2017 8:41 AM
Benzene	592	ppbv	D	20	1890	µg/m³	09/08/2017 8:41 AM
Bromoform	< 4.00	ppbv	D	20	< 41.3	µg/m³	09/08/2017 8:41 AM
Carbon disulfide	< 4.00	ppbv	D	20	< 12.5	µg/m³	09/08/2017 8:41 AM
Carbon tetrachloride	< 2.00	ppbv	D	20	< 12.6	µg/m³	09/08/2017 8:41 AM
Chlorobenzene	< 4.00	ppbv	D	20	< 18.4	µg/m³	09/08/2017 8:41 AM
Chloroethane	< 4.00	ppbv	D	20	< 10.6	µg/m³	09/08/2017 8:41 AM
Chloroform	< 2.00	ppbv	D	20	< 9.77	µg/m³	09/08/2017 8:41 AM
Ethylbenzene	16.7	ppbv	D	20	72.5	µg/m³	09/08/2017 8:41 AM
Methyl butyl ketone	< 4.00	ppbv	D +	20	< 16.4	µg/m³	09/08/2017 8:41 AM
Methyl ethyl ketone	10.7	ppbv	D	20	31.4	µg/m³	09/08/2017 8:41 AM
Methyl isobutyl ketone	< 4.00	ppbv	D	20	< 16.4	µg/m³	09/08/2017 8:41 AM
Methylene chloride	< 20.0	ppbv	D	20	< 77.7	µg/m³	09/08/2017 8:41 AM
Tetrachloroethene	< 2.00	ppbv	D	20	< 13.6	µg/m³	09/08/2017 8:41 AM
Toluene	314	ppbv	D	20	1180	µg/m³	09/08/2017 8:41 AM
Trichloroethene	< 2.00	ppbv	D	20	< 10.7	µg/m³	09/08/2017 8:41 AM
Vinyl chloride	< 4.00	ppbv	D	20	< 10.2	µg/m³	09/08/2017 8:41 AM
Xylenes (m&p)	225	ppbv	D	20	979	µg/m³	09/08/2017 8:41 AM
Xylenes (o)	81.5	ppbv	D	20	354	µg/m³	09/08/2017 8:41 AM
Surr: 4-Bromofluorobenzene	97.7	%Rec	D	Limit 70-130	No M.W. Data		09/08/2017 8:41 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 8/31/2017 9:45:00 AM
Received : 9/1/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1709003-003
Client Sample ID: CELL 2 AST

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 8.00	ppbv	D	40	< 43.7	µg/m³	09/08/2017 2:36 PM
1,1,2,2-Tetrachloroethane	< 8.00	ppbv	D	40	< 54.9	µg/m³	09/08/2017 2:36 PM
1,1,2-Trichloroethane	< 4.00	ppbv	D	40	< 21.8	µg/m³	09/08/2017 2:36 PM
1,1-Dichloroethane	< 8.00	ppbv	D	40	< 32.4	µg/m³	09/08/2017 2:36 PM
1,1-Dichloroethene	< 8.00	ppbv	D	40	< 31.7	µg/m³	09/08/2017 2:36 PM
1,2-Dichloroethane	< 4.00	ppbv	D	40	< 16.2	µg/m³	09/08/2017 2:36 PM
1,2-Dichloroethene (trans)	< 8.00	ppbv	D	40	< 31.7	µg/m³	09/08/2017 2:36 PM
1,2-Dichloropropane	< 8.00	ppbv	D	40	< 37.0	µg/m³	09/08/2017 2:36 PM
1,3-Dichloropropene (cis)	< 8.00	ppbv	D	40	< 36.3	µg/m³	09/08/2017 2:36 PM
1,3-Dichloropropene (trans)	< 8.00	ppbv	D	40	< 36.3	µg/m³	09/08/2017 2:36 PM
Acetone	< 800	ppbv	D	40	< 1900	µg/m³	09/08/2017 2:36 PM
Benzene	956	ppbv	D	40	3050	µg/m³	09/08/2017 2:36 PM
Bromoform	< 8.00	ppbv	D	40	< 82.7	µg/m³	09/08/2017 2:36 PM
Carbon disulfide	< 8.00	ppbv	D	40	< 24.9	µg/m³	09/08/2017 2:36 PM
Carbon tetrachloride	< 4.00	ppbv	D	40	< 25.2	µg/m³	09/08/2017 2:36 PM
Chlorobenzene	< 8.00	ppbv	D	40	< 36.8	µg/m³	09/08/2017 2:36 PM
Chloroethane	< 8.00	ppbv	D	40	< 21.1	µg/m³	09/08/2017 2:36 PM
Chloroform	< 4.00	ppbv	D	40	< 19.5	µg/m³	09/08/2017 2:36 PM
Ethylbenzene	< 8.00	ppbv	D	40	< 34.7	µg/m³	09/08/2017 2:36 PM
Methyl butyl ketone	< 8.00	ppbv	D +	40	< 32.8	µg/m³	09/08/2017 2:36 PM
Methyl ethyl ketone	< 8.00	ppbv	D	40	< 23.6	µg/m³	09/08/2017 2:36 PM
Methyl isobutyl ketone	< 8.00	ppbv	D	40	< 32.8	µg/m³	09/08/2017 2:36 PM
Methylene chloride	< 40.0	ppbv	D	40	< 155	µg/m³	09/08/2017 2:36 PM
Tetrachloroethene	< 4.00	ppbv	D	40	< 27.1	µg/m³	09/08/2017 2:36 PM
Toluene	< 160	ppbv	D	40	< 603	µg/m³	09/08/2017 2:36 PM
Trichloroethene	< 4.00	ppbv	D	40	< 21.5	µg/m³	09/08/2017 2:36 PM
Vinyl chloride	< 8.00	ppbv	D	40	< 20.4	µg/m³	09/08/2017 2:36 PM
Xylenes (m&p)	44.7	ppbv	D	40	194	µg/m³	09/08/2017 2:36 PM
Xylenes (o)	18.4	ppbv	D	40	79.7	µg/m³	09/08/2017 2:36 PM
Surr: 4-Bromofluorobenzene	97.2	%Rec	D	Limit 70-130	No M.W. Data		09/08/2017 2:36 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 9/11/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 8/31/2017 9:50:00 AM
Received : 9/1/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1709003-004
Client Sample ID: CELL 2 SVE

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	09/08/2017 12:58 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	09/08/2017 12:58 AM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	09/08/2017 12:58 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	09/08/2017 12:58 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	09/08/2017 12:58 AM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	09/08/2017 12:58 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	09/08/2017 12:58 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	09/08/2017 12:58 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	09/08/2017 12:58 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	09/08/2017 12:58 AM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	09/08/2017 12:58 AM
Benzene	0.34	ppbv		1	1.09	µg/m³	09/08/2017 12:58 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	09/08/2017 12:58 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	09/08/2017 12:58 AM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	09/08/2017 12:58 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	09/08/2017 12:58 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	09/08/2017 12:58 AM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	09/08/2017 12:58 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	09/08/2017 12:58 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	09/08/2017 12:58 AM
Methyl ethyl ketone	< 0.20	ppbv		1	< 0.59	µg/m³	09/08/2017 12:58 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	09/08/2017 12:58 AM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	09/08/2017 12:58 AM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	09/08/2017 12:58 AM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	09/08/2017 12:58 AM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	09/08/2017 12:58 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	09/08/2017 12:58 AM
Xylenes (m&p)	< 0.40	ppbv		1	< 1.74	µg/m³	09/08/2017 12:58 AM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	09/08/2017 12:58 AM
Surr: 4-Bromofluorobenzene	99.2	%Rec	Limit	70-130	No M.W. Data		09/08/2017 12:58 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 8/31/2017 9:25:00 AM
Received : 9/1/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1709003-005
Client Sample ID: CELL 1

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 8.00	ppbv	D	40	< 43.7	µg/m³	09/08/2017 10:00 AM
1,1,2,2-Tetrachloroethane	< 8.00	ppbv	D	40	< 54.9	µg/m³	09/08/2017 10:00 AM
1,1,2-Trichloroethane	< 4.00	ppbv	D	40	< 21.8	µg/m³	09/08/2017 10:00 AM
1,1-Dichloroethane	< 8.00	ppbv	D	40	< 32.4	µg/m³	09/08/2017 10:00 AM
1,1-Dichloroethene	< 8.00	ppbv	D	40	< 31.7	µg/m³	09/08/2017 10:00 AM
1,2-Dichloroethane	< 4.00	ppbv	D	40	< 16.2	µg/m³	09/08/2017 10:00 AM
1,2-Dichloroethene (trans)	< 8.00	ppbv	D	40	< 31.7	µg/m³	09/08/2017 10:00 AM
1,2-Dichloropropane	< 8.00	ppbv	D	40	< 37.0	µg/m³	09/08/2017 10:00 AM
1,3-Dichloropropene (cis)	< 8.00	ppbv	D	40	< 36.3	µg/m³	09/08/2017 10:00 AM
1,3-Dichloropropene (trans)	< 8.00	ppbv	D	40	< 36.3	µg/m³	09/08/2017 10:00 AM
Acetone	< 800	ppbv	D	40	< 1900	µg/m³	09/08/2017 10:00 AM
Benzene	1,500	ppbv	D	40	4780	µg/m³	09/08/2017 10:00 AM
Bromoform	< 8.00	ppbv	D	40	< 82.7	µg/m³	09/08/2017 10:00 AM
Carbon disulfide	< 8.00	ppbv	D	40	< 24.9	µg/m³	09/08/2017 10:00 AM
Carbon tetrachloride	< 4.00	ppbv	D	40	< 25.2	µg/m³	09/08/2017 10:00 AM
Chlorobenzene	< 8.00	ppbv	D	40	< 36.8	µg/m³	09/08/2017 10:00 AM
Chloroethane	< 8.00	ppbv	D	40	< 21.1	µg/m³	09/08/2017 10:00 AM
Chloroform	< 4.00	ppbv	D	40	< 19.5	µg/m³	09/08/2017 10:00 AM
Ethylbenzene	< 8.00	ppbv	D	40	< 34.7	µg/m³	09/08/2017 10:00 AM
Methyl butyl ketone	< 8.00	ppbv	D +	40	< 32.8	µg/m³	09/08/2017 10:00 AM
Methyl ethyl ketone	< 8.00	ppbv	D	40	< 23.6	µg/m³	09/08/2017 10:00 AM
Methyl isobutyl ketone	< 8.00	ppbv	D	40	< 32.8	µg/m³	09/08/2017 10:00 AM
Methylene chloride	< 40.0	ppbv	D	40	< 155	µg/m³	09/08/2017 10:00 AM
Tetrachloroethene	< 4.00	ppbv	D	40	< 27.1	µg/m³	09/08/2017 10:00 AM
Toluene	< 160	ppbv	D	40	< 603	µg/m³	09/08/2017 10:00 AM
Trichloroethene	< 4.00	ppbv	D	40	< 21.5	µg/m³	09/08/2017 10:00 AM
Vinyl chloride	< 8.00	ppbv	D	40	< 20.4	µg/m³	09/08/2017 10:00 AM
Xylenes (m&p)	16.3	ppbv	D	40	70.9	µg/m³	09/08/2017 10:00 AM
Xylenes (o)	13.5	ppbv	D	40	58.7	µg/m³	09/08/2017 10:00 AM
Surr: 4-Bromofluorobenzene	96.9	%Rec	D	Limit 70-130	No M.W. Data		09/08/2017 10:00 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
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Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Date Reported : 9/11/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 8/31/2017 9:00:00 AM
Received : 9/1/2017 1:30:00 PM
Collected By CLIENT

Lab No. : 1709003-006
Client Sample ID: CELL 3

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 8.00	ppbv	D	40	< 43.7	µg/m³	09/08/2017 10:56 AM
1,1,2,2-Tetrachloroethane	< 8.00	ppbv	D	40	< 54.9	µg/m³	09/08/2017 10:56 AM
1,1,2-Trichloroethane	< 4.00	ppbv	D	40	< 21.8	µg/m³	09/08/2017 10:56 AM
1,1-Dichloroethane	< 8.00	ppbv	D	40	< 32.4	µg/m³	09/08/2017 10:56 AM
1,1-Dichloroethene	< 8.00	ppbv	D	40	< 31.7	µg/m³	09/08/2017 10:56 AM
1,2-Dichloroethane	< 4.00	ppbv	D	40	< 16.2	µg/m³	09/08/2017 10:56 AM
1,2-Dichloroethene (trans)	< 8.00	ppbv	D	40	< 31.7	µg/m³	09/08/2017 10:56 AM
1,2-Dichloropropane	< 8.00	ppbv	D	40	< 37.0	µg/m³	09/08/2017 10:56 AM
1,3-Dichloropropene (cis)	< 8.00	ppbv	D	40	< 36.3	µg/m³	09/08/2017 10:56 AM
1,3-Dichloropropene (trans)	< 8.00	ppbv	D	40	< 36.3	µg/m³	09/08/2017 10:56 AM
Acetone	< 800	ppbv	D	40	< 1900	µg/m³	09/08/2017 10:56 AM
Benzene	9,440	ppbv	D	404	30200	µg/m³	09/08/2017 12:30 PM
Bromoform	< 8.00	ppbv	D	40	< 82.7	µg/m³	09/08/2017 10:56 AM
Carbon disulfide	< 8.00	ppbv	D	40	< 24.9	µg/m³	09/08/2017 10:56 AM
Carbon tetrachloride	< 4.00	ppbv	D	40	< 25.2	µg/m³	09/08/2017 10:56 AM
Chlorobenzene	< 8.00	ppbv	D	40	< 36.8	µg/m³	09/08/2017 10:56 AM
Chloroethane	< 8.00	ppbv	D	40	< 21.1	µg/m³	09/08/2017 10:56 AM
Chloroform	< 4.00	ppbv	D	40	< 19.5	µg/m³	09/08/2017 10:56 AM
Ethylbenzene	11.0	ppbv	D	40	48.0	µg/m³	09/08/2017 10:56 AM
Methyl butyl ketone	< 8.00	ppbv	D +	40	< 32.8	µg/m³	09/08/2017 10:56 AM
Methyl ethyl ketone	< 8.00	ppbv	D	40	< 23.6	µg/m³	09/08/2017 10:56 AM
Methyl isobutyl ketone	< 8.00	ppbv	D	40	< 32.8	µg/m³	09/08/2017 10:56 AM
Methylene chloride	< 40.0	ppbv	D	40	< 155	µg/m³	09/08/2017 10:56 AM
Tetrachloroethene	< 4.00	ppbv	D	40	< 27.1	µg/m³	09/08/2017 10:56 AM
Toluene	863	ppbv	D	40	3250	µg/m³	09/08/2017 10:56 AM
Trichloroethene	< 4.00	ppbv	D	40	< 21.5	µg/m³	09/08/2017 10:56 AM
Vinyl chloride	< 8.00	ppbv	D	40	< 20.4	µg/m³	09/08/2017 10:56 AM
Xylenes (m&p)	115	ppbv	D	40	499	µg/m³	09/08/2017 10:56 AM
Xylenes (o)	79.1	ppbv	D	40	343	µg/m³	09/08/2017 10:56 AM
Surr: 4-Bromofluorobenzene	96.9	%Rec	D	Limit 70-130	No M.W. Data		09/08/2017 10:56 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 9/11/2017

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1709003**

11-Sep-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107669**

Sample ID **VBLK090717** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107669**
Client ID: **PBW** Batch ID: **R107669** TestNo: **ETO-15** Analysis Date: **9/7/2017** SeqNo: **2396003**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
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QC SUMMARY REPORT

WO#: **1709003**

11-Sep-17

Client: Enviro Analytics Group
Project: Sparrows Point IM
BatchID: **R107669**

Sample ID **VBLK090717** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107669**
Client ID: **PBW** Batch ID: **R107669** TestNo: **ETO-15** Analysis Date: **9/7/2017** SeqNo: **2396003**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	9.70		10.00		97.0	70	130				

Sample ID **LFB090718** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107669**
Client ID: **ZZZZZZ** Batch ID: **R107669** TestNo: **ETO-15** Analysis Date: **9/7/2017** SeqNo: **2396004**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	11.0	0.20	10.00	0	110	70	130				
Chloroethane	11.1	0.20	10.00	0	111	70	130				
Methylene chloride	9.10	0.20	10.00	0	91.0	70	130				
Acetone	10.8	0.20	10.00	0	108	70	130				
Carbon disulfide	10.1	0.20	10.00	0	101	70	130				
1,1-Dichloroethene	9.35	0.20	10.00	0	93.5	70	130				
1,1-Dichloroethane	9.70	0.20	10.00	0	97.0	70	130				
1,2-Dichloroethene (trans)	9.23	0.20	10.00	0	92.3	70	130				
Methyl ethyl ketone	11.1	0.20	10.00	0	111	70	130				
Chloroform	8.82	0.20	10.00	0	88.2	70	130				
1,2-Dichloroethane	9.18	0.20	10.00	0	91.8	70	130				
1,1,1-Trichloroethane	8.45	0.20	10.00	0	84.5	70	130				
Carbon tetrachloride	8.68	0.20	10.00	0	86.8	70	130				
1,2-Dichloropropane	9.94	0.20	10.00	0	99.4	70	130				
1,3-Dichloropropene (cis)	10.1	0.20	10.00	0	101	70	130				
Trichloroethene	9.17	0.20	10.00	0	91.7	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1709003**

11-Sep-17

Client: Enviro Analytics Group
Project: Sparrows Point IM

BatchID: **R107669**

Sample ID **LFB090718** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107669**
Client ID: **ZZZZZZ** Batch ID: **R107669** TestNo: **ETO-15** Analysis Date: **9/7/2017** SeqNo: **2396004**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	9.61	0.20	10.00	0	96.1	70	130				
1,3-Dichloropropene (trans)	10.4	0.20	10.00	0	104	70	130				
1,1,2-Trichloroethane	9.16	0.20	10.00	0	91.6	70	130				
Bromoform	10.1	0.20	10.00	0	101	70	130				
Methyl isobutyl ketone	10.6	0.20	10.00	0	106	70	130				
Methyl butyl ketone	11.5	0.20	10.00	0	115	70	130				
Tetrachloroethene	8.85	0.20	10.00	0	88.5	70	130				
1,1,2,2-Tetrachloroethane	9.95	0.20	10.00	0	99.5	70	130				
Toluene	9.74	0.20	10.00	0	97.4	70	130				
Chlorobenzene	9.23	0.20	10.00	0	92.3	70	130				
Ethylbenzene	9.74	0.20	10.00	0	97.4	70	130				
Xylenes (m&p)	19.1	0.20	20.00	0	95.5	70	130				
Xylenes (o)	9.49	0.20	10.00	0	94.9	70	130				
Surr: 4-Bromofluorobenzene	9.85		10.00		98.5	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

Sample Receipt Checklist

Client Name **ENVIRO-MD** Date and Time Received: **9/1/2017 1:30:00 PM**

Work Order Number: **1709003** RcptNo: **1** Received by **Jaclyn Kuri**

Completed by: Jaclyn Kuri Reviewed by: Caitlin Panzarella

Completed Date: 9/2/2017 1:56:58 PM Reviewed Date: 9/5/2017 5:10:59 PM

Carrier name: FedEx

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐	NA	☐
Preservative added to bottles:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA	☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA	☐
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	°
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☐	No ☑		
Airbill or Sticker?	Air Bil ☑	Sticker ☐	Not Present	☐
Airbill No:	7457 4550 4400			

Case Number: SDG: SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1709003

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

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

September 28, 2017

James Calenda
Enviro Analytics Group
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: SPARROWS MONTHLY
Pace Project No.: 7030364

Dear James Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on September 19, 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.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Caitlin Panzarella

Caitlin Panzarella
caitlin.panzarella@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Josh Burke, Enviro Analytics Group

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WO#: 7030364
7030364
1709026

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

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

ENVIRO-MD

Section A Required Client Information:
Company: ENVIRO ANALYTICS GROUP
Address: 1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To: jcalanda@enviroanalyticsgroup.com
Phone: Fax:
Requested Due Date/TAT: STD

Section B Required Project Information:
Report To: Jeff Wilson
Copy To: James Calenda
Purchase Order No.:
Project Name: Sparrows Monthly
Project Number:

Section C Invoice Information:
Attention: Laura Sargent
Company Name: Enviro Analytics Group
Address: 1650 Des Peres Rd, Suite 303, St. Louis, MO 63131
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #:

Page: 1 of 1

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other X

Location of Sampling by State: MD

Reporting Units: ug/m³ X mg/m³ X PPBV X PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other_____

Method: PM10, 3C- Fixed Gas (%), TO-3, TO-3M (Methane), TO-4 (PCBs), TO-13 (PAH), TO-14, TO-15, TO15 Short List*

Section D Required Client Information

AIR SAMPLE ID — Sample IDs MUST BE UNIQUE

Valid Media Codes: MEDIA / CODE — Tedlar Bag TB; 1 Liter Summa Can 1LC; 6 Liter Summa Can 6LC; Low Volume Puff LVP; High Volume Puff HVP; Other PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED START DATE	START TIME	STOP DATE	STOP TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Canister Pressure (Initial Lab)	Canister Pressure (Final Lab)	Summa Can Number	Flow Control Number	PM10	3C- Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1	Cell 2 AST			9-18-17	1215			30	0	30"		846	QT1							X			001
2	Cell 2 SVE				1210			30	0	30"		856	QT2							X			2
3	Cell 3				1050			30	0	30"		3403	QT3							X			3
4	Cell 1				1130			30	0	30"		3406	QT4							X			4
5	Cell 5 AST Off Gas				1015			30	0	30"		3407	QT7							X			5
6	Cell 5 INF				1020			30	0	30"		3413	QT8							X			6
7										30"		16654	QT9										
8										30"		16707	QT11										
9																							
10																							
11																							
12																							

Comments:
SPARROWS MONTHLY
457, 45509206
9191
9180

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
EAG	9-18-17	1300		9/19/17	1200

SAMPLE CONDITIONS: Temp in °C; Custody Sealed Cooler Y/N; Samples Intact Y/N

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jeff Wilson
SIGNATURE of SAMPLER:
DATE Signed (MM / DD / YY): 09/18/17

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 9/18/2017 12:15:00 PM
Received : 9/19/2017 12:20:00 PM
Collected By CLIENT

Lab No. : 1709026-001
Client Sample ID: CELL 2 AST

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 8.00	ppbv	D	40	< 43.7	µg/m³	09/20/2017 12:18 PM
1,1,2,2-Tetrachloroethane	< 8.00	ppbv	D	40	< 54.9	µg/m³	09/20/2017 12:18 PM
1,1,2-Trichloroethane	< 4.00	ppbv	D	40	< 21.8	µg/m³	09/20/2017 12:18 PM
1,1-Dichloroethane	< 8.00	ppbv	D	40	< 32.4	µg/m³	09/20/2017 12:18 PM
1,1-Dichloroethene	< 8.00	ppbv	D	40	< 31.7	µg/m³	09/20/2017 12:18 PM
1,2-Dichloroethane	< 4.00	ppbv	D	40	< 16.2	µg/m³	09/20/2017 12:18 PM
1,2-Dichloroethene (trans)	< 8.00	ppbv	D	40	< 31.7	µg/m³	09/20/2017 12:18 PM
1,2-Dichloropropane	< 8.00	ppbv	D	40	< 37.0	µg/m³	09/20/2017 12:18 PM
1,3-Dichloropropene (cis)	< 8.00	ppbv	D	40	< 36.3	µg/m³	09/20/2017 12:18 PM
1,3-Dichloropropene (trans)	< 8.00	ppbv	D	40	< 36.3	µg/m³	09/20/2017 12:18 PM
Acetone	< 800	ppbv	D	40	< 1900	µg/m³	09/20/2017 12:18 PM
Benzene	5,610	ppbv	D	250	17900	µg/m³	09/26/2017 2:34 PM
Bromoform	< 8.00	ppbv	D	40	< 82.7	µg/m³	09/20/2017 12:18 PM
Carbon disulfide	< 8.00	ppbv	D	40	< 24.9	µg/m³	09/20/2017 12:18 PM
Carbon tetrachloride	< 4.00	ppbv	D	40	< 25.2	µg/m³	09/20/2017 12:18 PM
Chlorobenzene	< 8.00	ppbv	D	40	< 36.8	µg/m³	09/20/2017 12:18 PM
Chloroethane	< 8.00	ppbv	D	40	< 21.1	µg/m³	09/20/2017 12:18 PM
Chloroform	< 4.00	ppbv	D	40	< 19.5	µg/m³	09/20/2017 12:18 PM
Ethylbenzene	13.4	ppbv	D	40	58.4	µg/m³	09/20/2017 12:18 PM
Methyl butyl ketone	< 8.00	ppbv	D +	40	< 32.8	µg/m³	09/20/2017 12:18 PM
Methyl ethyl ketone	< 8.00	ppbv	D	40	< 23.6	µg/m³	09/20/2017 12:18 PM
Methyl isobutyl ketone	< 8.00	ppbv	D	40	< 32.8	µg/m³	09/20/2017 12:18 PM
Methylene chloride	< 40.0	ppbv	D	40	< 155	µg/m³	09/20/2017 12:18 PM
Tetrachloroethene	< 4.00	ppbv	D	40	< 27.1	µg/m³	09/20/2017 12:18 PM
Toluene	510	ppbv	D	40	1920	µg/m³	09/20/2017 12:18 PM
Trichloroethene	< 4.00	ppbv	D	40	< 21.5	µg/m³	09/20/2017 12:18 PM
Vinyl chloride	< 8.00	ppbv	D	40	< 20.4	µg/m³	09/20/2017 12:18 PM
Xylenes (m&p)	123	ppbv	D	40	536	µg/m³	09/20/2017 12:18 PM
Xylenes (o)	48.7	ppbv	D	40	212	µg/m³	09/20/2017 12:18 PM
Surr: 4-Bromofluorobenzene	97.9	%Rec	D	Limit 70-130	No M.W. Data		09/20/2017 12:18 PM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 9/27/2017

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 9/18/2017 12:10:00 PM
Received : 9/19/2017 12:20:00 PM
Collected By CLIENT

Lab No. : 1709026-002
Client Sample ID: CELL 2 SVE

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	09/20/2017 8:58 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	09/20/2017 8:58 AM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	09/20/2017 8:58 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	09/20/2017 8:58 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	09/20/2017 8:58 AM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	09/20/2017 8:58 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	09/20/2017 8:58 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	09/20/2017 8:58 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	09/20/2017 8:58 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	09/20/2017 8:58 AM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	09/20/2017 8:58 AM
Benzene	5.09	ppbv		1	16.3	µg/m³	09/20/2017 8:58 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	09/20/2017 8:58 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	09/20/2017 8:58 AM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	09/20/2017 8:58 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	09/20/2017 8:58 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	09/20/2017 8:58 AM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	09/20/2017 8:58 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	09/20/2017 8:58 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	09/20/2017 8:58 AM
Methyl ethyl ketone	0.56	ppbv		1	1.64	µg/m³	09/20/2017 8:58 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	09/20/2017 8:58 AM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	09/20/2017 8:58 AM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	09/20/2017 8:58 AM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	09/20/2017 8:58 AM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	09/20/2017 8:58 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	09/20/2017 8:58 AM
Xylenes (m&p)	< 0.40	ppbv		1	< 1.74	µg/m³	09/20/2017 8:58 AM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	09/20/2017 8:58 AM
Surr: 4-Bromofluorobenzene	96.0	%Rec	Limit	70-130	No M.W. Data		09/20/2017 8:58 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 9/18/2017 10:50:00 AM
Received : 9/19/2017 12:20:00 PM
Collected By CLIENT

Lab No. : 1709026-003
Client Sample ID: CELL 3

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 8.00	ppbv	D	40	< 43.7	µg/m³	09/26/2017 2:10 AM
1,1,2,2-Tetrachloroethane	< 8.00	ppbv	D	40	< 54.9	µg/m³	09/26/2017 2:10 AM
1,1,2-Trichloroethane	< 4.00	ppbv	D	40	< 21.8	µg/m³	09/26/2017 2:10 AM
1,1-Dichloroethane	< 8.00	ppbv	D	40	< 32.4	µg/m³	09/26/2017 2:10 AM
1,1-Dichloroethene	< 8.00	ppbv	D	40	< 31.7	µg/m³	09/26/2017 2:10 AM
1,2-Dichloroethane	< 4.00	ppbv	D	40	< 16.2	µg/m³	09/26/2017 2:10 AM
1,2-Dichloroethene (trans)	< 8.00	ppbv	D	40	< 31.7	µg/m³	09/26/2017 2:10 AM
1,2-Dichloropropane	< 8.00	ppbv	D	40	< 37.0	µg/m³	09/26/2017 2:10 AM
1,3-Dichloropropene (cis)	< 8.00	ppbv	D	40	< 36.3	µg/m³	09/26/2017 2:10 AM
1,3-Dichloropropene (trans)	< 8.00	ppbv	D	40	< 36.3	µg/m³	09/26/2017 2:10 AM
Acetone	< 800	ppbv	Dc	40	< 1900	µg/m³	09/26/2017 2:10 AM
Benzene	1,150	ppbv	D	40	3680	µg/m³	09/26/2017 2:10 AM
Bromoform	< 8.00	ppbv	D	40	< 82.7	µg/m³	09/26/2017 2:10 AM
Carbon disulfide	< 8.00	ppbv	D	40	< 24.9	µg/m³	09/26/2017 2:10 AM
Carbon tetrachloride	< 4.00	ppbv	D	40	< 25.2	µg/m³	09/26/2017 2:10 AM
Chlorobenzene	< 8.00	ppbv	D	40	< 36.8	µg/m³	09/26/2017 2:10 AM
Chloroethane	< 8.00	ppbv	DS	40	< 21.1	µg/m³	09/26/2017 2:10 AM
Chloroform	< 4.00	ppbv	D	40	< 19.5	µg/m³	09/26/2017 2:10 AM
Ethylbenzene	< 8.00	ppbv	D	40	< 34.7	µg/m³	09/26/2017 2:10 AM
Methyl butyl ketone	< 8.00	ppbv	D +	40	< 32.8	µg/m³	09/26/2017 2:10 AM
Methyl ethyl ketone	< 8.00	ppbv	D	40	< 23.6	µg/m³	09/26/2017 2:10 AM
Methyl isobutyl ketone	< 8.00	ppbv	D	40	< 32.8	µg/m³	09/26/2017 2:10 AM
Methylene chloride	< 40.0	ppbv	D	40	< 155	µg/m³	09/26/2017 2:10 AM
Tetrachloroethene	< 4.00	ppbv	D	40	< 27.1	µg/m³	09/26/2017 2:10 AM
Toluene	< 160	ppbv	D	40	< 603	µg/m³	09/26/2017 2:10 AM
Trichloroethene	< 4.00	ppbv	D	40	< 21.5	µg/m³	09/26/2017 2:10 AM
Vinyl chloride	< 8.00	ppbv	D	40	< 20.4	µg/m³	09/26/2017 2:10 AM
Xylenes (m&p)	< 16.0	ppbv	D	40	< 69.5	µg/m³	09/26/2017 2:10 AM
Xylenes (o)	10.7	ppbv	D	40	46.6	µg/m³	09/26/2017 2:10 AM
Surr: 4-Bromofluorobenzene	101	%Rec	D Limit	70-130	No M.W. Data		09/26/2017 2:10 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
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r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
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Caitlin Panzarella
Project Manager : Caitlin Panzarella

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NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 9/18/2017 11:30:00 AM
Received : 9/19/2017 12:20:00 PM
Collected By CLIENT

Lab No. : 1709026-004
Client Sample ID: CELL 1

Sample Information:
Type : Air
Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	4.06	ppbv	D	20	22.2	µg/m³	09/26/2017 11:04 AM
1,1,2,2-Tetrachloroethane	< 4.00	ppbv	D	20	< 27.5	µg/m³	09/26/2017 11:04 AM
1,1,2-Trichloroethane	< 2.00	ppbv	D	20	< 10.9	µg/m³	09/26/2017 11:04 AM
1,1-Dichloroethane	< 4.00	ppbv	D	20	< 16.2	µg/m³	09/26/2017 11:04 AM
1,1-Dichloroethene	< 4.00	ppbv	D	20	< 15.9	µg/m³	09/26/2017 11:04 AM
1,2-Dichloroethane	< 2.00	ppbv	D	20	< 8.09	µg/m³	09/26/2017 11:04 AM
1,2-Dichloroethene (trans)	< 4.00	ppbv	D	20	< 15.9	µg/m³	09/26/2017 11:04 AM
1,2-Dichloropropane	< 4.00	ppbv	D	20	< 18.5	µg/m³	09/26/2017 11:04 AM
1,3-Dichloropropene (cis)	< 4.00	ppbv	D	20	< 18.2	µg/m³	09/26/2017 11:04 AM
1,3-Dichloropropene (trans)	< 4.00	ppbv	D	20	< 18.2	µg/m³	09/26/2017 11:04 AM
Acetone	< 400	ppbv	Dc	20	< 950	µg/m³	09/26/2017 11:04 AM
Benzene	665	ppbv	D	20	2120	µg/m³	09/26/2017 11:04 AM
Bromoform	< 4.00	ppbv	D	20	< 41.3	µg/m³	09/26/2017 11:04 AM
Carbon disulfide	< 4.00	ppbv	D	20	< 12.5	µg/m³	09/26/2017 11:04 AM
Carbon tetrachloride	< 2.00	ppbv	D	20	< 12.6	µg/m³	09/26/2017 11:04 AM
Chlorobenzene	< 4.00	ppbv	D	20	< 18.4	µg/m³	09/26/2017 11:04 AM
Chloroethane	< 4.00	ppbv	DS	20	< 10.6	µg/m³	09/26/2017 11:04 AM
Chloroform	< 2.00	ppbv	D	20	< 9.77	µg/m³	09/26/2017 11:04 AM
Ethylbenzene	< 4.00	ppbv	D	20	< 17.4	µg/m³	09/26/2017 11:04 AM
Methyl butyl ketone	< 4.00	ppbv	D +	20	< 16.4	µg/m³	09/26/2017 11:04 AM
Methyl ethyl ketone	< 4.00	ppbv	D	20	< 11.8	µg/m³	09/26/2017 11:04 AM
Methyl isobutyl ketone	< 4.00	ppbv	D	20	< 16.4	µg/m³	09/26/2017 11:04 AM
Methylene chloride	< 20.0	ppbv	D	20	< 77.7	µg/m³	09/26/2017 11:04 AM
Tetrachloroethene	< 2.00	ppbv	D	20	< 13.6	µg/m³	09/26/2017 11:04 AM
Toluene	< 80.0	ppbv	D	20	< 301	µg/m³	09/26/2017 11:04 AM
Trichloroethene	< 2.00	ppbv	D	20	< 10.7	µg/m³	09/26/2017 11:04 AM
Vinyl chloride	< 4.00	ppbv	D	20	< 10.2	µg/m³	09/26/2017 11:04 AM
Xylenes (m&p)	< 8.00	ppbv	D	20	< 34.7	µg/m³	09/26/2017 11:04 AM
Xylenes (o)	4.28	ppbv	D	20	18.6	µg/m³	09/26/2017 11:04 AM
Surr: 4-Bromofluorobenzene	99.7	%Rec	D Limit	70-130	No M.W. Data		09/26/2017 11:04 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
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S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

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NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 9/18/2017 10:15:00 AM
Received : 9/19/2017 12:20:00 PM
Collected By CLIENT

Lab No. : 1709026-005
Client Sample ID: CELL 5 AST OFF GAS

Sample Information:
Type : Air
Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 5.00	ppbv	D	25	< 27.3	µg/m³	09/20/2017 11:44 AM
1,1,2,2-Tetrachloroethane	< 5.00	ppbv	D	25	< 34.3	µg/m³	09/20/2017 11:44 AM
1,1,2-Trichloroethane	< 2.50	ppbv	D	25	< 13.6	µg/m³	09/20/2017 11:44 AM
1,1-Dichloroethane	< 5.00	ppbv	D	25	< 20.2	µg/m³	09/20/2017 11:44 AM
1,1-Dichloroethene	< 5.00	ppbv	D	25	< 19.8	µg/m³	09/20/2017 11:44 AM
1,2-Dichloroethane	< 2.50	ppbv	D	25	< 10.1	µg/m³	09/20/2017 11:44 AM
1,2-Dichloroethene (trans)	< 5.00	ppbv	D	25	< 19.8	µg/m³	09/20/2017 11:44 AM
1,2-Dichloropropane	< 5.00	ppbv	D	25	< 23.1	µg/m³	09/20/2017 11:44 AM
1,3-Dichloropropene (cis)	< 5.00	ppbv	D	25	< 22.7	µg/m³	09/20/2017 11:44 AM
1,3-Dichloropropene (trans)	< 5.00	ppbv	D	25	< 22.7	µg/m³	09/20/2017 11:44 AM
Acetone	< 500	ppbv	D	25	< 1190	µg/m³	09/20/2017 11:44 AM
Benzene	917	ppbv	D	25	2930	µg/m³	09/20/2017 11:44 AM
Bromoform	< 5.00	ppbv	D	25	< 51.7	µg/m³	09/20/2017 11:44 AM
Carbon disulfide	< 5.00	ppbv	D	25	< 15.6	µg/m³	09/20/2017 11:44 AM
Carbon tetrachloride	< 2.50	ppbv	D	25	< 15.7	µg/m³	09/20/2017 11:44 AM
Chlorobenzene	< 5.00	ppbv	D	25	< 23.0	µg/m³	09/20/2017 11:44 AM
Chloroethane	< 5.00	ppbv	D	25	< 13.2	µg/m³	09/20/2017 11:44 AM
Chloroform	< 2.50	ppbv	D	25	< 12.2	µg/m³	09/20/2017 11:44 AM
Ethylbenzene	37.8	ppbv	D	25	164	µg/m³	09/20/2017 11:44 AM
Methyl butyl ketone	< 5.00	ppbv	D +	25	< 20.5	µg/m³	09/20/2017 11:44 AM
Methyl ethyl ketone	< 5.00	ppbv	D	25	< 14.7	µg/m³	09/20/2017 11:44 AM
Methyl isobutyl ketone	< 5.00	ppbv	D	25	< 20.5	µg/m³	09/20/2017 11:44 AM
Methylene chloride	< 25.0	ppbv	D	25	< 97.1	µg/m³	09/20/2017 11:44 AM
Tetrachloroethene	< 2.50	ppbv	D	25	< 17.0	µg/m³	09/20/2017 11:44 AM
Toluene	537	ppbv	D	25	2020	µg/m³	09/20/2017 11:44 AM
Trichloroethene	< 2.50	ppbv	D	25	< 13.4	µg/m³	09/20/2017 11:44 AM
Vinyl chloride	< 5.00	ppbv	D	25	< 12.8	µg/m³	09/20/2017 11:44 AM
Xylenes (m&p)	501	ppbv	D	25	2180	µg/m³	09/20/2017 11:44 AM
Xylenes (o)	198	ppbv	D	25	859	µg/m³	09/20/2017 11:44 AM
Surr: 4-Bromofluorobenzene	96.6	%Rec	D Limit	70-130	No M.W. Data		09/20/2017 11:44 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
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Caitlin Panzarella
Project Manager : Caitlin Panzarella

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TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results for the samples and analytes requested

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Enviro Analytics Group
1430 Sparrows Point Blvd
Baltimore, MD 21219
Attn To : James Calenda
Collected : 9/18/2017 10:25:00 AM
Received : 9/19/2017 12:20:00 PM
Collected By CLIENT

Lab No. : 1709026-006
Client Sample ID: CELL 5 INF

Sample Information:
Type : Air

Origin:

Method: ETO-15 :

Parameter(s)	Result	Units	Qualifier	D.F.	Result	Units	Date Analyzed
1,1,1-Trichloroethane	< 0.20	ppbv		1	< 1.09	µg/m³	09/20/2017 8:13 AM
1,1,2,2-Tetrachloroethane	< 0.20	ppbv		1	< 1.37	µg/m³	09/20/2017 8:13 AM
1,1,2-Trichloroethane	< 0.10	ppbv		1	< 0.55	µg/m³	09/20/2017 8:13 AM
1,1-Dichloroethane	< 0.20	ppbv		1	< 0.81	µg/m³	09/20/2017 8:13 AM
1,1-Dichloroethene	< 0.20	ppbv		1	< 0.79	µg/m³	09/20/2017 8:13 AM
1,2-Dichloroethane	< 0.10	ppbv		1	< 0.40	µg/m³	09/20/2017 8:13 AM
1,2-Dichloroethene (trans)	< 0.20	ppbv		1	< 0.79	µg/m³	09/20/2017 8:13 AM
1,2-Dichloropropane	< 0.20	ppbv		1	< 0.92	µg/m³	09/20/2017 8:13 AM
1,3-Dichloropropene (cis)	< 0.20	ppbv		1	< 0.91	µg/m³	09/20/2017 8:13 AM
1,3-Dichloropropene (trans)	< 0.20	ppbv		1	< 0.91	µg/m³	09/20/2017 8:13 AM
Acetone	< 20.0	ppbv		1	< 47.5	µg/m³	09/20/2017 8:13 AM
Benzene	< 0.10	ppbv		1	< 0.32	µg/m³	09/20/2017 8:13 AM
Bromoform	< 0.20	ppbv		1	< 2.07	µg/m³	09/20/2017 8:13 AM
Carbon disulfide	< 0.20	ppbv		1	< 0.62	µg/m³	09/20/2017 8:13 AM
Carbon tetrachloride	< 0.10	ppbv		1	< 0.63	µg/m³	09/20/2017 8:13 AM
Chlorobenzene	< 0.20	ppbv		1	< 0.92	µg/m³	09/20/2017 8:13 AM
Chloroethane	< 0.20	ppbv		1	< 0.53	µg/m³	09/20/2017 8:13 AM
Chloroform	< 0.10	ppbv		1	< 0.49	µg/m³	09/20/2017 8:13 AM
Ethylbenzene	< 0.20	ppbv		1	< 0.87	µg/m³	09/20/2017 8:13 AM
Methyl butyl ketone	< 0.20	ppbv	+	1	< 0.82	µg/m³	09/20/2017 8:13 AM
Methyl ethyl ketone	< 0.20	ppbv		1	< 0.59	µg/m³	09/20/2017 8:13 AM
Methyl isobutyl ketone	< 0.20	ppbv		1	< 0.82	µg/m³	09/20/2017 8:13 AM
Methylene chloride	< 1.00	ppbv		1	< 3.88	µg/m³	09/20/2017 8:13 AM
Tetrachloroethene	< 0.10	ppbv		1	< 0.68	µg/m³	09/20/2017 8:13 AM
Toluene	< 4.00	ppbv		1	< 15.1	µg/m³	09/20/2017 8:13 AM
Trichloroethene	< 0.10	ppbv		1	< 0.54	µg/m³	09/20/2017 8:13 AM
Vinyl chloride	< 0.20	ppbv		1	< 0.51	µg/m³	09/20/2017 8:13 AM
Xylenes (m&p)	< 0.40	ppbv		1	< 1.74	µg/m³	09/20/2017 8:13 AM
Xylenes (o)	< 0.20	ppbv		1	< 0.87	µg/m³	09/20/2017 8:13 AM
Surr: 4-Bromofluorobenzene	97.9	%Rec	Limit	70-130	No M.W. Data		09/20/2017 8:13 AM

Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
c = Calibration acceptability criteria exceeded for this analyte.Value estimated
H = Received/analyzed outside of analytical holding time
J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
N = Indicates presumptive evidence of compound
P = Duplicate RPD outside of control limit
r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella
Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Date Reported : 9/27/2017

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

QC SUMMARY REPORT

WO#: **1709026**

27-Sep-17

Client: Enviro Analytics Group
Project: Sparrows Monthly Air

BatchID: **R107694**

Sample ID **VBLK091917** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107694**
Client ID: **PBW** Batch ID: **R107694** TestNo: **ETO-15** Analysis Date: **9/19/2017** SeqNo: **2396732**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1709026**

27-Sep-17

Client: Enviro Analytics Group
Project: Sparrows Monthly Air

BatchID: **R107694**

Sample ID **VBLK091917** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107694**
Client ID: **PBW** Batch ID: **R107694** TestNo: **ETO-15** Analysis Date: **9/19/2017** SeqNo: **2396732**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	9.54		10.00		95.4	70	130				

Sample ID **LFB091917** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107694**
Client ID: **ZZZZZZ** Batch ID: **R107694** TestNo: **ETO-15** Analysis Date: **9/19/2017** SeqNo: **2396733**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	10.5	0.20	10.00	0	105	70	130				
Chloroethane	9.67	0.20	10.00	0	96.7	70	130				
Methylene chloride	9.78	0.20	10.00	0	97.8	70	130				
Acetone	11.8	0.20	10.00	0	118	70	130				
Carbon disulfide	11.3	0.20	10.00	0	113	70	130				
1,1-Dichloroethene	10.4	0.20	10.00	0	104	70	130				
1,1-Dichloroethane	10.2	0.20	10.00	0	102	70	130				
1,2-Dichloroethene (trans)	9.99	0.20	10.00	0	99.9	70	130				
Methyl ethyl ketone	11.4	0.20	10.00	0	114	70	130				
Chloroform	9.67	0.20	10.00	0	96.7	70	130				
1,2-Dichloroethane	9.66	0.20	10.00	0	96.6	70	130				
1,1,1-Trichloroethane	9.39	0.20	10.00	0	93.9	70	130				
Carbon tetrachloride	10.0	0.20	10.00	0	100	70	130				
1,2-Dichloropropane	10.5	0.20	10.00	0	105	70	130				
1,3-Dichloropropene (cis)	10.5	0.20	10.00	0	105	70	130				
Trichloroethene	10.3	0.20	10.00	0	103	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1709026**

27-Sep-17

Client: Enviro Analytics Group
Project: Sparrows Monthly Air

BatchID: **R107694**

Sample ID **LFB091917** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107694**
Client ID: **ZZZZZZ** Batch ID: **R107694** TestNo: **ETO-15** Analysis Date: **9/19/2017** SeqNo: **2396733**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	10.4	0.20	10.00	0	104	70	130				
1,3-Dichloropropene (trans)	10.7	0.20	10.00	0	107	70	130				
1,1,2-Trichloroethane	9.87	0.20	10.00	0	98.7	70	130				
Bromoform	10.5	0.20	10.00	0	105	70	130				
Methyl isobutyl ketone	10.9	0.20	10.00	0	109	70	130				
Methyl butyl ketone	11.4	0.20	10.00	0	114	70	130				
Tetrachloroethene	9.76	0.20	10.00	0	97.6	70	130				
1,1,2,2-Tetrachloroethane	10.8	0.20	10.00	0	108	70	130				
Toluene	10.7	0.20	10.00	0	107	70	130				
Chlorobenzene	10.2	0.20	10.00	0	102	70	130				
Ethylbenzene	10.4	0.20	10.00	0	104	70	130				
Xylenes (m&p)	20.3	0.20	20.00	0	102	70	130				
Xylenes (o)	10.3	0.20	10.00	0	103	70	130				
Surr: 4-Bromofluorobenzene	9.61		10.00		96.1	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
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O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1709026**

27-Sep-17

Client: Enviro Analytics Group
Project: Sparrows Monthly Air

BatchID: **R107700**

Sample ID **VBLK092517** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107700**
Client ID: **PBW** Batch ID: **R107700** TestNo: **ETO-15** Analysis Date: **9/25/2017** SeqNo: **2396893**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	< 0.20	0.20									
Chloroethane	< 0.20	0.20									
Methylene chloride	< 0.20	0.20									
Acetone	< 0.20	0.20									
Carbon disulfide	< 0.20	0.20									
1,1-Dichloroethene	< 0.20	0.20									
1,1-Dichloroethane	< 0.20	0.20									
1,2-Dichloroethene (trans)	< 0.20	0.20									
Methyl ethyl ketone	< 0.20	0.20									
Chloroform	< 0.20	0.20									
1,2-Dichloroethane	< 0.20	0.20									
1,1,1-Trichloroethane	< 0.20	0.20									
Carbon tetrachloride	< 0.20	0.20									
1,2-Dichloropropane	< 0.20	0.20									
1,3-Dichloropropene (cis)	< 0.20	0.20									
Trichloroethene	< 0.20	0.20									
Benzene	< 0.20	0.20									
1,3-Dichloropropene (trans)	< 0.20	0.20									
1,1,2-Trichloroethane	< 0.20	0.20									
Bromoform	< 0.20	0.20									
Methyl isobutyl ketone	< 0.20	0.20									
Methyl butyl ketone	< 0.20	0.20									
Tetrachloroethene	< 0.20	0.20									
1,1,2,2-Tetrachloroethane	< 0.20	0.20									
Toluene	< 0.20	0.20									
Chlorobenzene	< 0.20	0.20									

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **1709026**

27-Sep-17

Client: Enviro Analytics Group
Project: Sparrows Monthly Air
BatchID: **R107700**

Sample ID **VBLK092517** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107700**
Client ID: **PBW** Batch ID: **R107700** TestNo: **ETO-15** Analysis Date: **9/25/2017** SeqNo: **2396893**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	< 0.20	0.20									
Xylenes (m&p)	< 0.20	0.20									
Xylenes (o)	< 0.20	0.20									
Surr: 4-Bromofluorobenzene	10.0		10.00		100	70	130				

Sample ID **LFB092517** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107700**
Client ID: **ZZZZZZ** Batch ID: **R107700** TestNo: **ETO-15** Analysis Date: **9/25/2017** SeqNo: **2396894**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	7.58	0.20	10.00	0	75.8	70	130				
Chloroethane	6.40	0.20	10.00	0	64.0	70	130				S
Methylene chloride	7.64	0.20	10.00	0	76.4	70	130				
Acetone	7.68	0.20	10.00	0	76.8	70	130				
Carbon disulfide	8.98	0.20	10.00	0	89.8	70	130				
1,1-Dichloroethene	8.01	0.20	10.00	0	80.1	70	130				
1,1-Dichloroethane	8.13	0.20	10.00	0	81.3	70	130				
1,2-Dichloroethene (trans)	7.99	0.20	10.00	0	79.9	70	130				
Methyl ethyl ketone	8.53	0.20	10.00	0	85.3	70	130				
Chloroform	7.95	0.20	10.00	0	79.5	70	130				
1,2-Dichloroethane	8.08	0.20	10.00	0	80.8	70	130				
1,1,1-Trichloroethane	7.67	0.20	10.00	0	76.7	70	130				
Carbon tetrachloride	8.22	0.20	10.00	0	82.2	70	130				
1,2-Dichloropropane	8.26	0.20	10.00	0	82.6	70	130				
1,3-Dichloropropene (cis)	8.38	0.20	10.00	0	83.8	70	130				
Trichloroethene	8.51	0.20	10.00	0	85.1	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Second column confirmation exceeds	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified		

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QC SUMMARY REPORT

WO#: **1709026**

27-Sep-17

Client: Enviro Analytics Group
Project: Sparrows Monthly Air

BatchID: **R107700**

Sample ID **LFB092517** SampType: **LFB** TestCode: **TO-15** Units: **ppbv** Prep Date: RunNo: **107700**
Client ID: **ZZZZZZ** Batch ID: **R107700** TestNo: **ETO-15** Analysis Date: **9/25/2017** SeqNo: **2396894**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	8.37	0.20	10.00	0	83.7	70	130				
1,3-Dichloropropene (trans)	8.55	0.20	10.00	0	85.5	70	130				
1,1,2-Trichloroethane	8.04	0.20	10.00	0	80.4	70	130				
Bromoform	8.51	0.20	10.00	0	85.1	70	130				
Methyl isobutyl ketone	7.93	0.20	10.00	0	79.3	70	130				
Methyl butyl ketone	8.02	0.20	10.00	0	80.2	70	130				
Tetrachloroethene	7.84	0.20	10.00	0	78.4	70	130				
1,1,2,2-Tetrachloroethane	8.27	0.20	10.00	0	82.7	70	130				
Toluene	8.46	0.20	10.00	0	84.6	70	130				
Chlorobenzene	8.01	0.20	10.00	0	80.1	70	130				
Ethylbenzene	8.15	0.20	10.00	0	81.5	70	130				
Xylenes (m&p)	15.9	0.20	20.00	0	79.4	70	130				
Xylenes (o)	7.98	0.20	10.00	0	79.8	70	130				
Surr: 4-Bromofluorobenzene	9.79		10.00		97.9	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level	D	Dilution was required.	E	Value above quantitation range
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Sample Receipt Checklist

Client Name **ENVIRO-MD** Date and Time Received: **9/19/2017 12:20:00 PM**

Work Order Number: **1709026** RcptNo: **1** Received by **Linda Siciliano**

Completed by: Reviewed by: Caitlin Panzarella

Completed Date: 9/19/2017 3:32:27 PM Reviewed Date: 9/21/2017 4:46:37 PM

Carrier name: FedEx

Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐		
Is it clear what analyses were requested?	Yes ☑	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
Samples in proper container/bottle?	Yes ☑	No ☐		
Were correct preservatives used and noted?	Yes ☑	No ☐	NA	☐
Preservative added to bottles:				
Sample Condition?	Intact ☑	Broken ☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Was an attempt made to cool the samples?	Yes ☐	No ☐	NA	☑
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☐	NA	☑
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To	°
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water	☑
Are Samples considered acceptable?	Yes ☑	No ☐		
Custody Seals present?	Yes ☐	No ☑		
Airbill or Sticker?	Air Bil ☑	Sticker ☐	Not Present	☐
Airbill No:	74574550 9206 9191 9180			

Case Number: SDG: SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1709026

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

November 01, 2017

James Calenda
Environmental Liability Transfer
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: Sparrows Point
Pace Project No.: 10407984

Dear James Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 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,

Nathan Boberg
nathan.boberg@pacelabs.com
(612)607-6407
Project Manager

Enclosures

cc: Josh Burke, Enviro Analytics Group

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project:	Sparrows Point
Pace Project No.:	10407984

Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #:MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon NwTPH Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C
West Virginia DEP Certification #: 382
Wisconsin Certification #: 999407970

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SAMPLE SUMMARY

Project: Sparrows Point
Pace Project No.: 10407984

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10407984001	**Cell 5 AS Off Gas**	Air	10/18/17 09:15	10/20/17 09:50
10407984002	**Cell 5 INF**	Air	10/18/17 09:20	10/20/17 09:50
10407984003	**Cell 3**	Air	10/18/17 09:55	10/20/17 09:50
10407984004	**Cell 1**	Air	10/18/17 10:15	10/20/17 09:50
10407984005	**Cell 6 Oxidizer**	Air	10/18/17 10:50	10/20/17 09:50
10407984006	**Cell 6 Blower**	Air	10/18/17 10:45	10/20/17 09:50
10407984007	**Cell 2 SVE**	Air	10/18/17 11:20	10/20/17 09:50
10407984008	**Cell 2 AS Off Gas**	Air	10/18/17 11:25	10/20/17 09:50

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SAMPLE ANALYTE COUNT

Project: Sparrows Point
Pace Project No.: 10407984

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10407984001	**Cell 5 AS Off Gas**	TO-15	MJL	61
10407984002	**Cell 5 INF**	TO-15	MJL	61
10407984003	**Cell 3**	TO-15	MJL	61
10407984004	**Cell 1**	TO-15	MJL	61
10407984005	**Cell 6 Oxidizer**	TO-15	MJL	61
10407984006	**Cell 6 Blower**	TO-15	MJL	61
10407984007	**Cell 2 SVE**	TO-15	MJL	61
10407984008	**Cell 2 AS Off Gas**	TO-15	MJL	61

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PROJECT NARRATIVE

Project: Sparrows Point
Pace Project No.: 10407984

Method: **TO-15**
Description: TO15 MSV AIR
Client: Enviro Analytics Group
Date: November 01, 2017

General Information:
8 samples were analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 505626

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- LCS (Lab ID: 2748531)
  - Propylene

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

QC Batch: 505209

IQ: The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

- Cell 6 Blower (Lab ID: 10407984006)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 505626

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 2748531)
  - Propylene

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Sparrows Point
Pace Project No.: 10407984

Method: **TO-15**
Description: TO15 MSV AIR
Client: Enviro Analytics Group
Date: November 01, 2017

Analyte Comments:

QC Batch: 505209

A3: The sample was analyzed by serial dilution.

- Cell 5 AS Off Gas (Lab ID: 10407984001)
  - Benzene
  - Naphthalene
- Cell 6 Blower (Lab ID: 10407984006)
  - 1,2,4-Trimethylbenzene
  - 1,3,5-Trimethylbenzene
  - Benzene
  - Ethylbenzene
  - m&p-Xylene
  - o-Xylene
  - Styrene
  - Toluene

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- Cell 6 Blower (Lab ID: 10407984006)
  - Benzene
  - n-Heptane
  - n-Hexane
  - Toluene

QC Batch: 505626

A3: The sample was analyzed by serial dilution.

- Cell 2 AS Off Gas (Lab ID: 10407984008)
  - Benzene
  - m&p-Xylene
  - o-Xylene
  - Toluene

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- Cell 2 AS Off Gas (Lab ID: 10407984008)
  - Benzene

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 5 AS Off Gas **Lab ID: 10407984001** Collected: 10/18/17 09:15 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**22.0**	ug/m3	3.0	1.26		10/28/17 22:14	67-64-1	
Benzene	**116000**	ug/m3	524	1612.8		10/30/17 10:45	71-43-2	A3
Benzyl chloride	ND	ug/m3	1.3	1.26		10/28/17 22:14	100-44-7	
Bromodichloromethane	ND	ug/m3	1.7	1.26		10/28/17 22:14	75-27-4	
Bromoform	ND	ug/m3	2.6	1.26		10/28/17 22:14	75-25-2	
Bromomethane	ND	ug/m3	1.0	1.26		10/28/17 22:14	74-83-9	
1,3-Butadiene	ND	ug/m3	0.57	1.26		10/28/17 22:14	106-99-0	
2-Butanone (MEK)	**11.4**	ug/m3	3.8	1.26		10/28/17 22:14	78-93-3	
Carbon disulfide	**0.88**	ug/m3	0.79	1.26		10/28/17 22:14	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.81	1.26		10/28/17 22:14	56-23-5	
Chlorobenzene	**4.4**	ug/m3	1.2	1.26		10/28/17 22:14	108-90-7	
Chloroethane	ND	ug/m3	0.68	1.26		10/28/17 22:14	75-00-3	
Chloroform	ND	ug/m3	0.62	1.26		10/28/17 22:14	67-66-3	
Chloromethane	**0.93**	ug/m3	0.53	1.26		10/28/17 22:14	74-87-3	
Cyclohexane	**3.2**	ug/m3	0.88	1.26		10/28/17 22:14	110-82-7	
Dibromochloromethane	ND	ug/m3	2.2	1.26		10/28/17 22:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.0	1.26		10/28/17 22:14	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.5	1.26		10/28/17 22:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.5	1.26		10/28/17 22:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.5	1.26		10/28/17 22:14	106-46-7	
Dichlorodifluoromethane	**2.5**	ug/m3	1.3	1.26		10/28/17 22:14	75-71-8	
1,1-Dichloroethane	**3.5**	ug/m3	1.0	1.26		10/28/17 22:14	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.52	1.26		10/28/17 22:14	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.0	1.26		10/28/17 22:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.0	1.26		10/28/17 22:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.0	1.26		10/28/17 22:14	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.2	1.26		10/28/17 22:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.2	1.26		10/28/17 22:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.2	1.26		10/28/17 22:14	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.8	1.26		10/28/17 22:14	76-14-2	
Ethanol	**30.2**	ug/m3	1.2	1.26		10/28/17 22:14	64-17-5	
Ethyl acetate	ND	ug/m3	0.92	1.26		10/28/17 22:14	141-78-6	
Ethylbenzene	**451**	ug/m3	55.4	63		10/29/17 18:35	100-41-4	
4-Ethyltoluene	**48.7**	ug/m3	1.3	1.26		10/28/17 22:14	622-96-8	
n-Heptane	**5.2**	ug/m3	1.0	1.26		10/28/17 22:14	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.7	1.26		10/28/17 22:14	87-68-3	
n-Hexane	**4.9**	ug/m3	0.91	1.26		10/28/17 22:14	110-54-3	
2-Hexanone	ND	ug/m3	5.2	1.26		10/28/17 22:14	591-78-6	
Methylene Chloride	ND	ug/m3	4.4	1.26		10/28/17 22:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.2	1.26		10/28/17 22:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.6	1.26		10/28/17 22:14	1634-04-4	
Naphthalene	**197000**	ug/m3	4290	1612.8		10/30/17 10:45	91-20-3	A3
2-Propanol	**3.5**	ug/m3	3.2	1.26		10/28/17 22:14	67-63-0	
Propylene	ND	ug/m3	0.44	1.26		10/28/17 22:14	115-07-1	
Styrene	**2010**	ug/m3	54.8	63		10/29/17 18:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.88	1.26		10/28/17 22:14	79-34-5	
Tetrachloroethene	ND	ug/m3	0.87	1.26		10/28/17 22:14	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 5 AS Off Gas **Lab ID: 10407984001** Collected: 10/18/17 09:15 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**1.3**	ug/m3	0.76	1.26		10/28/17 22:14	109-99-9	
Toluene	**5050**	ug/m3	48.5	63		10/29/17 18:35	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	4.8	1.26		10/28/17 22:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.4	1.26		10/28/17 22:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.69	1.26		10/28/17 22:14	79-00-5	
Trichloroethene	**0.96**	ug/m3	0.69	1.26		10/28/17 22:14	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.4	1.26		10/28/17 22:14	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.0	1.26		10/28/17 22:14	76-13-1	
1,2,4-Trimethylbenzene	**1470**	ug/m3	62.9	63		10/29/17 18:35	95-63-6	
1,3,5-Trimethylbenzene	**726**	ug/m3	62.9	63		10/29/17 18:35	108-67-8	
Vinyl acetate	ND	ug/m3	0.90	1.26		10/28/17 22:14	108-05-4	
Vinyl chloride	ND	ug/m3	0.33	1.26		10/28/17 22:14	75-01-4	
m&p-Xylene	**6240**	ug/m3	112	63		10/29/17 18:35	179601-23-1	
o-Xylene	**2360**	ug/m3	55.4	63		10/29/17 18:35	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 5 INF **Lab ID: 10407984002** Collected: 10/18/17 09:20 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**6.5**	ug/m3	2.8	1.18		10/28/17 23:26	67-64-1	
Benzene	**1.8**	ug/m3	0.38	1.18		10/28/17 23:26	71-43-2	
Benzyl chloride	ND	ug/m3	1.2	1.18		10/28/17 23:26	100-44-7	
Bromodichloromethane	ND	ug/m3	1.6	1.18		10/28/17 23:26	75-27-4	
Bromoform	ND	ug/m3	2.5	1.18		10/28/17 23:26	75-25-2	
Bromomethane	ND	ug/m3	0.93	1.18		10/28/17 23:26	74-83-9	
1,3-Butadiene	ND	ug/m3	0.53	1.18		10/28/17 23:26	106-99-0	
2-Butanone (MEK)	ND	ug/m3	3.5	1.18		10/28/17 23:26	78-93-3	
Carbon disulfide	ND	ug/m3	0.74	1.18		10/28/17 23:26	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.76	1.18		10/28/17 23:26	56-23-5	
Chlorobenzene	ND	ug/m3	1.1	1.18		10/28/17 23:26	108-90-7	
Chloroethane	ND	ug/m3	0.64	1.18		10/28/17 23:26	75-00-3	
Chloroform	ND	ug/m3	0.59	1.18		10/28/17 23:26	67-66-3	
Chloromethane	**0.86**	ug/m3	0.50	1.18		10/28/17 23:26	74-87-3	
Cyclohexane	ND	ug/m3	0.83	1.18		10/28/17 23:26	110-82-7	
Dibromochloromethane	ND	ug/m3	2.0	1.18		10/28/17 23:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.8	1.18		10/28/17 23:26	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.4	1.18		10/28/17 23:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.4	1.18		10/28/17 23:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.4	1.18		10/28/17 23:26	106-46-7	
Dichlorodifluoromethane	**1.9**	ug/m3	1.2	1.18		10/28/17 23:26	75-71-8	
1,1-Dichloroethane	ND	ug/m3	0.97	1.18		10/28/17 23:26	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.48	1.18		10/28/17 23:26	107-06-2	
1,1-Dichloroethene	ND	ug/m3	0.96	1.18		10/28/17 23:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	0.96	1.18		10/28/17 23:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	0.96	1.18		10/28/17 23:26	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.1	1.18		10/28/17 23:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.1	1.18		10/28/17 23:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.1	1.18		10/28/17 23:26	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.7	1.18		10/28/17 23:26	76-14-2	
Ethanol	**4.3**	ug/m3	1.1	1.18		10/28/17 23:26	64-17-5	
Ethyl acetate	ND	ug/m3	0.86	1.18		10/28/17 23:26	141-78-6	
Ethylbenzene	ND	ug/m3	1.0	1.18		10/28/17 23:26	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.2	1.18		10/28/17 23:26	622-96-8	
n-Heptane	ND	ug/m3	0.98	1.18		10/28/17 23:26	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.6	1.18		10/28/17 23:26	87-68-3	
n-Hexane	**0.94**	ug/m3	0.85	1.18		10/28/17 23:26	110-54-3	
2-Hexanone	ND	ug/m3	4.9	1.18		10/28/17 23:26	591-78-6	
Methylene Chloride	ND	ug/m3	4.2	1.18		10/28/17 23:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	4.9	1.18		10/28/17 23:26	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.3	1.18		10/28/17 23:26	1634-04-4	
Naphthalene	**11.7**	ug/m3	3.1	1.18		10/29/17 17:29	91-20-3	
2-Propanol	ND	ug/m3	3.0	1.18		10/28/17 23:26	67-63-0	
Propylene	ND	ug/m3	0.41	1.18		10/28/17 23:26	115-07-1	
Styrene	ND	ug/m3	1.0	1.18		10/28/17 23:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.82	1.18		10/28/17 23:26	79-34-5	
Tetrachloroethene	ND	ug/m3	0.81	1.18		10/28/17 23:26	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 5 INF **Lab ID: 10407984002** Collected: 10/18/17 09:20 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	0.71	1.18		10/28/17 23:26	109-99-9	
Toluene	**2.8**	ug/m3	0.91	1.18		10/28/17 23:26	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	4.4	1.18		10/28/17 23:26	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.3	1.18		10/28/17 23:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.65	1.18		10/28/17 23:26	79-00-5	
Trichloroethene	ND	ug/m3	0.65	1.18		10/28/17 23:26	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.3	1.18		10/28/17 23:26	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	1.9	1.18		10/28/17 23:26	76-13-1	
1,2,4-Trimethylbenzene	**1.2**	ug/m3	1.2	1.18		10/28/17 23:26	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.2	1.18		10/28/17 23:26	108-67-8	
Vinyl acetate	**1.5**	ug/m3	0.84	1.18		10/28/17 23:26	108-05-4	
Vinyl chloride	ND	ug/m3	0.31	1.18		10/28/17 23:26	75-01-4	
m&p-Xylene	**2.5**	ug/m3	2.1	1.18		10/28/17 23:26	179601-23-1	
o-Xylene	**1.1**	ug/m3	1.0	1.18		10/28/17 23:26	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 3 **Lab ID: 10407984003** Collected: 10/18/17 09:55 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**24.5**	ug/m3	3.2	1.34		10/29/17 00:04	67-64-1	
Benzene	**7700**	ug/m3	29.2	89.78		10/29/17 19:42	71-43-2	
Benzyl chloride	ND	ug/m3	1.4	1.34		10/29/17 00:04	100-44-7	
Bromodichloromethane	ND	ug/m3	1.8	1.34		10/29/17 00:04	75-27-4	
Bromoform	ND	ug/m3	2.8	1.34		10/29/17 00:04	75-25-2	
Bromomethane	ND	ug/m3	1.1	1.34		10/29/17 00:04	74-83-9	
1,3-Butadiene	ND	ug/m3	0.60	1.34		10/29/17 00:04	106-99-0	
2-Butanone (MEK)	ND	ug/m3	4.0	1.34		10/29/17 00:04	78-93-3	
Carbon disulfide	**2.4**	ug/m3	0.84	1.34		10/29/17 00:04	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.86	1.34		10/29/17 00:04	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	1.34		10/29/17 00:04	108-90-7	
Chloroethane	ND	ug/m3	0.72	1.34		10/29/17 00:04	75-00-3	
Chloroform	ND	ug/m3	0.66	1.34		10/29/17 00:04	67-66-3	
Chloromethane	ND	ug/m3	0.56	1.34		10/29/17 00:04	74-87-3	
Cyclohexane	**2.7**	ug/m3	0.94	1.34		10/29/17 00:04	110-82-7	
Dibromochloromethane	ND	ug/m3	2.3	1.34		10/29/17 00:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.1	1.34		10/29/17 00:04	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.6	1.34		10/29/17 00:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.6	1.34		10/29/17 00:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.6	1.34		10/29/17 00:04	106-46-7	
Dichlorodifluoromethane	**2.1**	ug/m3	1.4	1.34		10/29/17 00:04	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		10/29/17 00:04	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.55	1.34		10/29/17 00:04	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.1	1.34		10/29/17 00:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		10/29/17 00:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		10/29/17 00:04	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	1.34		10/29/17 00:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.2	1.34		10/29/17 00:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.2	1.34		10/29/17 00:04	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.9	1.34		10/29/17 00:04	76-14-2	
Ethanol	**7.7**	ug/m3	1.3	1.34		10/29/17 00:04	64-17-5	
Ethyl acetate	ND	ug/m3	0.98	1.34		10/29/17 00:04	141-78-6	
Ethylbenzene	**10.2**	ug/m3	1.2	1.34		10/29/17 00:04	100-41-4	
4-Ethyltoluene	**1.7**	ug/m3	1.3	1.34		10/29/17 00:04	622-96-8	
n-Heptane	**1.2**	ug/m3	1.1	1.34		10/29/17 00:04	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.9	1.34		10/29/17 00:04	87-68-3	
n-Hexane	**4.2**	ug/m3	0.96	1.34		10/29/17 00:04	110-54-3	
2-Hexanone	ND	ug/m3	5.6	1.34		10/29/17 00:04	591-78-6	
Methylene Chloride	**17.8**	ug/m3	4.7	1.34		10/29/17 00:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.6	1.34		10/29/17 00:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.9	1.34		10/29/17 00:04	1634-04-4	
Naphthalene	**12.3**	ug/m3	3.6	1.34		10/29/17 00:04	91-20-3	
2-Propanol	ND	ug/m3	3.4	1.34		10/29/17 00:04	67-63-0	
Propylene	ND	ug/m3	0.47	1.34		10/29/17 00:04	115-07-1	
Styrene	ND	ug/m3	1.2	1.34		10/29/17 00:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.94	1.34		10/29/17 00:04	79-34-5	
Tetrachloroethene	ND	ug/m3	0.92	1.34		10/29/17 00:04	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 3 **Lab ID: 10407984003** Collected: 10/18/17 09:55 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	0.80	1.34		10/29/17 00:04	109-99-9	
Toluene	**1130**	ug/m3	69.1	89.78		10/29/17 19:42	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	5.1	1.34		10/29/17 00:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		10/29/17 00:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.74	1.34		10/29/17 00:04	79-00-5	
Trichloroethene	ND	ug/m3	0.74	1.34		10/29/17 00:04	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.5	1.34		10/29/17 00:04	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.1	1.34		10/29/17 00:04	76-13-1	
1,2,4-Trimethylbenzene	**2.4**	ug/m3	1.3	1.34		10/29/17 00:04	95-63-6	
1,3,5-Trimethylbenzene	**10.9**	ug/m3	1.3	1.34		10/29/17 00:04	108-67-8	
Vinyl acetate	ND	ug/m3	0.96	1.34		10/29/17 00:04	108-05-4	
Vinyl chloride	ND	ug/m3	0.35	1.34		10/29/17 00:04	75-01-4	
m&p-Xylene	**105**	ug/m3	2.4	1.34		10/29/17 00:04	179601-23-1	
o-Xylene	**82.7**	ug/m3	1.2	1.34		10/29/17 00:04	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 1 **Lab ID: 10407984004** Collected: 10/18/17 10:15 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**25.7**	ug/m3	3.0	1.26		10/29/17 00:40	67-64-1	
Benzene	**1180**	ug/m3	20.5	63		10/29/17 18:02	71-43-2	
Benzyl chloride	ND	ug/m3	1.3	1.26		10/29/17 00:40	100-44-7	
Bromodichloromethane	ND	ug/m3	1.7	1.26		10/29/17 00:40	75-27-4	
Bromoform	ND	ug/m3	2.6	1.26		10/29/17 00:40	75-25-2	
Bromomethane	ND	ug/m3	1.0	1.26		10/29/17 00:40	74-83-9	
1,3-Butadiene	ND	ug/m3	0.57	1.26		10/29/17 00:40	106-99-0	
2-Butanone (MEK)	ND	ug/m3	3.8	1.26		10/29/17 00:40	78-93-3	
Carbon disulfide	**1.7**	ug/m3	0.79	1.26		10/29/17 00:40	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.81	1.26		10/29/17 00:40	56-23-5	
Chlorobenzene	ND	ug/m3	1.2	1.26		10/29/17 00:40	108-90-7	
Chloroethane	ND	ug/m3	0.68	1.26		10/29/17 00:40	75-00-3	
Chloroform	ND	ug/m3	0.62	1.26		10/29/17 00:40	67-66-3	
Chloromethane	ND	ug/m3	0.53	1.26		10/29/17 00:40	74-87-3	
Cyclohexane	**20.5**	ug/m3	0.88	1.26		10/29/17 00:40	110-82-7	
Dibromochloromethane	ND	ug/m3	2.2	1.26		10/29/17 00:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.0	1.26		10/29/17 00:40	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.5	1.26		10/29/17 00:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.5	1.26		10/29/17 00:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.5	1.26		10/29/17 00:40	106-46-7	
Dichlorodifluoromethane	**2.0**	ug/m3	1.3	1.26		10/29/17 00:40	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.0	1.26		10/29/17 00:40	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.52	1.26		10/29/17 00:40	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.0	1.26		10/29/17 00:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.0	1.26		10/29/17 00:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.0	1.26		10/29/17 00:40	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.2	1.26		10/29/17 00:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.2	1.26		10/29/17 00:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.2	1.26		10/29/17 00:40	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.8	1.26		10/29/17 00:40	76-14-2	
Ethanol	**3.1**	ug/m3	1.2	1.26		10/29/17 00:40	64-17-5	
Ethyl acetate	ND	ug/m3	0.92	1.26		10/29/17 00:40	141-78-6	
Ethylbenzene	**8.3**	ug/m3	1.1	1.26		10/29/17 00:40	100-41-4	
4-Ethyltoluene	**2.5**	ug/m3	1.3	1.26		10/29/17 00:40	622-96-8	
n-Heptane	**20.7**	ug/m3	1.0	1.26		10/29/17 00:40	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.7	1.26		10/29/17 00:40	87-68-3	
n-Hexane	**4.3**	ug/m3	0.91	1.26		10/29/17 00:40	110-54-3	
2-Hexanone	ND	ug/m3	5.2	1.26		10/29/17 00:40	591-78-6	
Methylene Chloride	ND	ug/m3	4.4	1.26		10/29/17 00:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.2	1.26		10/29/17 00:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.6	1.26		10/29/17 00:40	1634-04-4	
Naphthalene	**5.5**	ug/m3	3.4	1.26		10/29/17 00:40	91-20-3	
2-Propanol	ND	ug/m3	3.2	1.26		10/29/17 00:40	67-63-0	
Propylene	ND	ug/m3	0.44	1.26		10/29/17 00:40	115-07-1	
Styrene	ND	ug/m3	1.1	1.26		10/29/17 00:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.88	1.26		10/29/17 00:40	79-34-5	
Tetrachloroethene	ND	ug/m3	0.87	1.26		10/29/17 00:40	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 1 **Lab ID: 10407984004** Collected: 10/18/17 10:15 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	0.76	1.26		10/29/17 00:40	109-99-9	
Toluene	**54.2**	ug/m3	0.97	1.26		10/29/17 00:40	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	4.8	1.26		10/29/17 00:40	120-82-1	
1,1,1-Trichloroethane	**21.6**	ug/m3	1.4	1.26		10/29/17 00:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.69	1.26		10/29/17 00:40	79-00-5	
Trichloroethene	ND	ug/m3	0.69	1.26		10/29/17 00:40	79-01-6	
Trichlorofluoromethane	**3.9**	ug/m3	1.4	1.26		10/29/17 00:40	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.0	1.26		10/29/17 00:40	76-13-1	
1,2,4-Trimethylbenzene	**4.3**	ug/m3	1.3	1.26		10/29/17 00:40	95-63-6	
1,3,5-Trimethylbenzene	**23.0**	ug/m3	1.3	1.26		10/29/17 00:40	108-67-8	
Vinyl acetate	**2.1**	ug/m3	0.90	1.26		10/29/17 00:40	108-05-4	
Vinyl chloride	ND	ug/m3	0.33	1.26		10/29/17 00:40	75-01-4	
m&p-Xylene	**95.6**	ug/m3	2.2	1.26		10/29/17 00:40	179601-23-1	
o-Xylene	**35.6**	ug/m3	1.1	1.26		10/29/17 00:40	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 6 Oxidizer **Lab ID: 10407984005** Collected: 10/18/17 10:50 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**10.6**	ug/m3	3.0	1.26		10/29/17 01:52	67-64-1	
Benzene	**76.6**	ug/m3	0.41	1.26		10/29/17 01:52	71-43-2	
Benzyl chloride	ND	ug/m3	1.3	1.26		10/29/17 01:52	100-44-7	
Bromodichloromethane	ND	ug/m3	1.7	1.26		10/29/17 01:52	75-27-4	
Bromoform	ND	ug/m3	2.6	1.26		10/29/17 01:52	75-25-2	
Bromomethane	ND	ug/m3	1.0	1.26		10/29/17 01:52	74-83-9	
1,3-Butadiene	ND	ug/m3	0.57	1.26		10/29/17 01:52	106-99-0	
2-Butanone (MEK)	**4.8**	ug/m3	3.8	1.26		10/29/17 01:52	78-93-3	
Carbon disulfide	ND	ug/m3	0.79	1.26		10/29/17 01:52	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.81	1.26		10/29/17 01:52	56-23-5	
Chlorobenzene	ND	ug/m3	1.2	1.26		10/29/17 01:52	108-90-7	
Chloroethane	ND	ug/m3	0.68	1.26		10/29/17 01:52	75-00-3	
Chloroform	ND	ug/m3	0.62	1.26		10/29/17 01:52	67-66-3	
Chloromethane	**1.0**	ug/m3	0.53	1.26		10/29/17 01:52	74-87-3	
Cyclohexane	**3.5**	ug/m3	0.88	1.26		10/29/17 01:52	110-82-7	
Dibromochloromethane	ND	ug/m3	2.2	1.26		10/29/17 01:52	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.0	1.26		10/29/17 01:52	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.5	1.26		10/29/17 01:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.5	1.26		10/29/17 01:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.5	1.26		10/29/17 01:52	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.3	1.26		10/29/17 01:52	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.0	1.26		10/29/17 01:52	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.52	1.26		10/29/17 01:52	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.0	1.26		10/29/17 01:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.0	1.26		10/29/17 01:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.0	1.26		10/29/17 01:52	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.2	1.26		10/29/17 01:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.2	1.26		10/29/17 01:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.2	1.26		10/29/17 01:52	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.8	1.26		10/29/17 01:52	76-14-2	
Ethanol	**4.4**	ug/m3	1.2	1.26		10/29/17 01:52	64-17-5	
Ethyl acetate	ND	ug/m3	0.92	1.26		10/29/17 01:52	141-78-6	
Ethylbenzene	ND	ug/m3	1.1	1.26		10/29/17 01:52	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.3	1.26		10/29/17 01:52	622-96-8	
n-Heptane	**4.8**	ug/m3	1.0	1.26		10/29/17 01:52	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.7	1.26		10/29/17 01:52	87-68-3	
n-Hexane	**8.9**	ug/m3	0.91	1.26		10/29/17 01:52	110-54-3	
2-Hexanone	ND	ug/m3	5.2	1.26		10/29/17 01:52	591-78-6	
Methylene Chloride	ND	ug/m3	4.4	1.26		10/29/17 01:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.2	1.26		10/29/17 01:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.6	1.26		10/29/17 01:52	1634-04-4	
Naphthalene	**10.1**	ug/m3	3.4	1.26		10/29/17 01:52	91-20-3	
2-Propanol	**5.9**	ug/m3	3.2	1.26		10/29/17 01:52	67-63-0	
Propylene	ND	ug/m3	0.44	1.26		10/29/17 01:52	115-07-1	
Styrene	ND	ug/m3	1.1	1.26		10/29/17 01:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.88	1.26		10/29/17 01:52	79-34-5	
Tetrachloroethene	ND	ug/m3	0.87	1.26		10/29/17 01:52	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 6 Oxidizer **Lab ID: 10407984005** Collected: 10/18/17 10:50 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	0.76	1.26		10/29/17 01:52	109-99-9	
Toluene	**12.1**	ug/m3	0.97	1.26		10/29/17 01:52	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	4.8	1.26		10/29/17 01:52	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.4	1.26		10/29/17 01:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.69	1.26		10/29/17 01:52	79-00-5	
Trichloroethene	ND	ug/m3	0.69	1.26		10/29/17 01:52	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.4	1.26		10/29/17 01:52	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.0	1.26		10/29/17 01:52	76-13-1	
1,2,4-Trimethylbenzene	**2.6**	ug/m3	1.3	1.26		10/29/17 01:52	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.3	1.26		10/29/17 01:52	108-67-8	
Vinyl acetate	**2.3**	ug/m3	0.90	1.26		10/29/17 01:52	108-05-4	
Vinyl chloride	ND	ug/m3	0.33	1.26		10/29/17 01:52	75-01-4	
m&p-Xylene	**2.3**	ug/m3	2.2	1.26		10/29/17 01:52	179601-23-1	
o-Xylene	ND	ug/m3	1.1	1.26		10/29/17 01:52	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 6 Blower **Lab ID: 10407984006** Collected: 10/18/17 10:45 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	ND	ug/m3	2.8	1.18		10/29/17 02:28	67-64-1	
Benzene	**1360000**	ug/m3	1960	6041.6		10/29/17 20:17	71-43-2	A3,E
Benzyl chloride	ND	ug/m3	1.2	1.18		10/29/17 02:28	100-44-7	
Bromodichloromethane	ND	ug/m3	1.6	1.18		10/29/17 02:28	75-27-4	
Bromoform	ND	ug/m3	2.5	1.18		10/29/17 02:28	75-25-2	
Bromomethane	ND	ug/m3	0.93	1.18		10/29/17 02:28	74-83-9	
1,3-Butadiene	ND	ug/m3	0.53	1.18		10/29/17 02:28	106-99-0	
2-Butanone (MEK)	ND	ug/m3	3.5	1.18		10/29/17 02:28	78-93-3	
Carbon disulfide	**80.5**	ug/m3	0.74	1.18		10/29/17 02:28	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.76	1.18		10/29/17 02:28	56-23-5	
Chlorobenzene	**20.9**	ug/m3	1.1	1.18		10/29/17 02:28	108-90-7	
Chloroethane	ND	ug/m3	0.64	1.18		10/29/17 02:28	75-00-3	
Chloroform	ND	ug/m3	0.59	1.18		10/29/17 02:28	67-66-3	
Chloromethane	**1.2**	ug/m3	0.50	1.18		10/29/17 02:28	74-87-3	
Cyclohexane	ND	ug/m3	0.83	1.18		10/29/17 02:28	110-82-7	
Dibromochloromethane	ND	ug/m3	2.0	1.18		10/29/17 02:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.8	1.18		10/29/17 02:28	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.4	1.18		10/29/17 02:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.4	1.18		10/29/17 02:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.4	1.18		10/29/17 02:28	106-46-7	
Dichlorodifluoromethane	**2.2**	ug/m3	1.2	1.18		10/29/17 02:28	75-71-8	
1,1-Dichloroethane	ND	ug/m3	0.97	1.18		10/29/17 02:28	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.48	1.18		10/29/17 02:28	107-06-2	
1,1-Dichloroethene	ND	ug/m3	0.96	1.18		10/29/17 02:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	0.96	1.18		10/29/17 02:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	0.96	1.18		10/29/17 02:28	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.1	1.18		10/29/17 02:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.1	1.18		10/29/17 02:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.1	1.18		10/29/17 02:28	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.7	1.18		10/29/17 02:28	76-14-2	
Ethanol	**9.7**	ug/m3	1.1	1.18		10/29/17 02:28	64-17-5	
Ethyl acetate	ND	ug/m3	0.86	1.18		10/29/17 02:28	141-78-6	
Ethylbenzene	**39100**	ug/m3	5320	6041.6		10/29/17 20:17	100-41-4	A3
4-Ethyltoluene	**64.1**	ug/m3	1.2	1.18		10/29/17 02:28	622-96-8	
n-Heptane	**786**	ug/m3	0.98	1.18		10/29/17 02:28	142-82-5	E
Hexachloro-1,3-butadiene	ND	ug/m3	2.6	1.18		10/29/17 02:28	87-68-3	
n-Hexane	**973**	ug/m3	0.85	1.18		10/29/17 02:28	110-54-3	E
2-Hexanone	ND	ug/m3	4.9	1.18		10/29/17 02:28	591-78-6	
Methylene Chloride	ND	ug/m3	4.2	1.18		10/29/17 02:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	4.9	1.18		10/29/17 02:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.3	1.18		10/29/17 02:28	1634-04-4	
Naphthalene	**41.5**	ug/m3	3.1	1.18		10/29/17 02:28	91-20-3	
2-Propanol	ND	ug/m3	3.0	1.18		10/29/17 02:28	67-63-0	
Propylene	**13.6**	ug/m3	0.41	1.18		10/29/17 02:28	115-07-1	
Styrene	**32400**	ug/m3	5260	6041.6		10/29/17 20:17	100-42-5	A3
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.82	1.18		10/29/17 02:28	79-34-5	
Tetrachloroethene	**1.3**	ug/m3	0.81	1.18		10/29/17 02:28	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 6 Blower **Lab ID: 10407984006** Collected: 10/18/17 10:45 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	0.71	1.18		10/29/17 02:28	109-99-9	
Toluene	**866000**	ug/m3	4650	6041.6		10/29/17 20:17	108-88-3	A3,E
1,2,4-Trichlorobenzene	ND	ug/m3	4.4	1.18		10/29/17 02:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.3	1.18		10/29/17 02:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.65	1.18		10/29/17 02:28	79-00-5	
Trichloroethene	ND	ug/m3	0.65	1.18		10/29/17 02:28	79-01-6	
Trichlorofluoromethane	**1.7**	ug/m3	1.3	1.18		10/29/17 02:28	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	1.9	1.18		10/29/17 02:28	76-13-1	
1,2,4-Trimethylbenzene	**17800**	ug/m3	6040	6041.6		10/29/17 20:17	95-63-6	A3
1,3,5-Trimethylbenzene	**12400**	ug/m3	6040	6041.6		10/29/17 20:17	108-67-8	A3
Vinyl acetate	ND	ug/m3	0.84	1.18		10/29/17 02:28	108-05-4	
Vinyl chloride	ND	ug/m3	0.31	1.18		10/29/17 02:28	75-01-4	
m&p-Xylene	**192000**	ug/m3	10700	6041.6		10/29/17 20:17	179601-23-1	A3
o-Xylene	**52500**	ug/m3	5320	6041.6		10/29/17 20:17	95-47-6	A3

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 2 SVE **Lab ID: 10407984007** Collected: 10/18/17 11:20 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**23.7**	ug/m3	3.2	1.34		10/29/17 01:16	67-64-1	
Benzene	**10.3**	ug/m3	0.44	1.34		10/29/17 01:16	71-43-2	
Benzyl chloride	ND	ug/m3	1.4	1.34		10/29/17 01:16	100-44-7	
Bromodichloromethane	ND	ug/m3	1.8	1.34		10/29/17 01:16	75-27-4	
Bromoform	ND	ug/m3	2.8	1.34		10/29/17 01:16	75-25-2	
Bromomethane	ND	ug/m3	1.1	1.34		10/29/17 01:16	74-83-9	
1,3-Butadiene	ND	ug/m3	0.60	1.34		10/29/17 01:16	106-99-0	
2-Butanone (MEK)	ND	ug/m3	4.0	1.34		10/29/17 01:16	78-93-3	
Carbon disulfide	ND	ug/m3	0.84	1.34		10/29/17 01:16	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.86	1.34		10/29/17 01:16	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	1.34		10/29/17 01:16	108-90-7	
Chloroethane	ND	ug/m3	0.72	1.34		10/29/17 01:16	75-00-3	
Chloroform	ND	ug/m3	0.66	1.34		10/29/17 01:16	67-66-3	
Chloromethane	**0.71**	ug/m3	0.56	1.34		10/29/17 01:16	74-87-3	
Cyclohexane	ND	ug/m3	0.94	1.34		10/29/17 01:16	110-82-7	
Dibromochloromethane	ND	ug/m3	2.3	1.34		10/29/17 01:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.1	1.34		10/29/17 01:16	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.6	1.34		10/29/17 01:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.6	1.34		10/29/17 01:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.6	1.34		10/29/17 01:16	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.4	1.34		10/29/17 01:16	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		10/29/17 01:16	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.55	1.34		10/29/17 01:16	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.1	1.34		10/29/17 01:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		10/29/17 01:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		10/29/17 01:16	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	1.34		10/29/17 01:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.2	1.34		10/29/17 01:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.2	1.34		10/29/17 01:16	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.9	1.34		10/29/17 01:16	76-14-2	
Ethanol	**7.1**	ug/m3	1.3	1.34		10/29/17 01:16	64-17-5	
Ethyl acetate	ND	ug/m3	0.98	1.34		10/29/17 01:16	141-78-6	
Ethylbenzene	ND	ug/m3	1.2	1.34		10/29/17 01:16	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.3	1.34		10/29/17 01:16	622-96-8	
n-Heptane	ND	ug/m3	1.1	1.34		10/29/17 01:16	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.9	1.34		10/29/17 01:16	87-68-3	
n-Hexane	ND	ug/m3	0.96	1.34		10/29/17 01:16	110-54-3	
2-Hexanone	ND	ug/m3	5.6	1.34		10/29/17 01:16	591-78-6	
Methylene Chloride	ND	ug/m3	4.7	1.34		10/29/17 01:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.6	1.34		10/29/17 01:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.9	1.34		10/29/17 01:16	1634-04-4	
Naphthalene	**5.2**	ug/m3	3.6	1.34		10/29/17 01:16	91-20-3	
2-Propanol	ND	ug/m3	3.4	1.34		10/29/17 01:16	67-63-0	
Propylene	ND	ug/m3	0.47	1.34		10/29/17 01:16	115-07-1	
Styrene	ND	ug/m3	1.2	1.34		10/29/17 01:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.94	1.34		10/29/17 01:16	79-34-5	
Tetrachloroethene	ND	ug/m3	0.92	1.34		10/29/17 01:16	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 2 SVE **Lab ID: 10407984007** Collected: 10/18/17 11:20 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	0.80	1.34		10/29/17 01:16	109-99-9	
Toluene	**4.6**	ug/m3	1.0	1.34		10/29/17 01:16	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	5.1	1.34		10/29/17 01:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		10/29/17 01:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.74	1.34		10/29/17 01:16	79-00-5	
Trichloroethene	ND	ug/m3	0.74	1.34		10/29/17 01:16	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.5	1.34		10/29/17 01:16	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.1	1.34		10/29/17 01:16	76-13-1	
1,2,4-Trimethylbenzene	**2.5**	ug/m3	1.3	1.34		10/29/17 01:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.3	1.34		10/29/17 01:16	108-67-8	
Vinyl acetate	**1.3**	ug/m3	0.96	1.34		10/29/17 01:16	108-05-4	
Vinyl chloride	ND	ug/m3	0.35	1.34		10/29/17 01:16	75-01-4	
m&p-Xylene	**3.9**	ug/m3	2.4	1.34		10/29/17 01:16	179601-23-1	
o-Xylene	**1.4**	ug/m3	1.2	1.34		10/29/17 01:16	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 2 AS Off Gas **Lab ID: 10407984008** Collected: 10/18/17 11:25 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	ND	ug/m3	109	45.25		10/31/17 17:39	67-64-1	
Benzene	**4060000**	ug/m3	3760	11583.77		11/01/17 11:39	71-43-2	A3,E
Benzyl chloride	ND	ug/m3	47.5	45.25		10/31/17 17:39	100-44-7	
Bromodichloromethane	ND	ug/m3	61.5	45.25		10/31/17 17:39	75-27-4	
Bromoform	ND	ug/m3	95.1	45.25		10/31/17 17:39	75-25-2	
Bromomethane	ND	ug/m3	35.7	45.25		10/31/17 17:39	74-83-9	
1,3-Butadiene	ND	ug/m3	20.4	45.25		10/31/17 17:39	106-99-0	
2-Butanone (MEK)	ND	ug/m3	136	45.25		10/31/17 17:39	78-93-3	
Carbon disulfide	**99.0**	ug/m3	28.5	45.25		10/31/17 17:39	75-15-0	
Carbon tetrachloride	ND	ug/m3	29.0	45.25		10/31/17 17:39	56-23-5	
Chlorobenzene	ND	ug/m3	42.5	45.25		10/31/17 17:39	108-90-7	
Chloroethane	ND	ug/m3	24.4	45.25		10/31/17 17:39	75-00-3	
Chloroform	ND	ug/m3	22.4	45.25		10/31/17 17:39	67-66-3	
Chloromethane	ND	ug/m3	19.0	45.25		10/31/17 17:39	74-87-3	
Cyclohexane	ND	ug/m3	31.7	45.25		10/31/17 17:39	110-82-7	
Dibromochloromethane	ND	ug/m3	78.3	45.25		10/31/17 17:39	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	70.6	45.25		10/31/17 17:39	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	55.2	45.25		10/31/17 17:39	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	55.2	45.25		10/31/17 17:39	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	55.2	45.25		10/31/17 17:39	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	45.7	45.25		10/31/17 17:39	75-71-8	
1,1-Dichloroethane	ND	ug/m3	37.1	45.25		10/31/17 17:39	75-34-3	
1,2-Dichloroethane	ND	ug/m3	18.6	45.25		10/31/17 17:39	107-06-2	
1,1-Dichloroethene	ND	ug/m3	36.7	45.25		10/31/17 17:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	36.7	45.25		10/31/17 17:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	36.7	45.25		10/31/17 17:39	156-60-5	
1,2-Dichloropropane	ND	ug/m3	42.5	45.25		10/31/17 17:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	41.6	45.25		10/31/17 17:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	41.6	45.25		10/31/17 17:39	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	64.3	45.25		10/31/17 17:39	76-14-2	
Ethanol	ND	ug/m3	43.3	45.25		10/31/17 17:39	64-17-5	
Ethyl acetate	ND	ug/m3	33.0	45.25		10/31/17 17:39	141-78-6	
Ethylbenzene	**4830**	ug/m3	39.8	45.25		10/31/17 17:39	100-41-4	
4-Ethyltoluene	**144**	ug/m3	45.2	45.25		10/31/17 17:39	622-96-8	
n-Heptane	ND	ug/m3	37.6	45.25		10/31/17 17:39	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	98.1	45.25		10/31/17 17:39	87-68-3	
n-Hexane	ND	ug/m3	32.6	45.25		10/31/17 17:39	110-54-3	
2-Hexanone	ND	ug/m3	188	45.25		10/31/17 17:39	591-78-6	
Methylene Chloride	ND	ug/m3	160	45.25		10/31/17 17:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	188	45.25		10/31/17 17:39	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	166	45.25		10/31/17 17:39	1634-04-4	
Naphthalene	**523**	ug/m3	120	45.25		10/31/17 17:39	91-20-3	
2-Propanol	ND	ug/m3	113	45.25		10/31/17 17:39	67-63-0	
Propylene	ND	ug/m3	15.8	45.25		10/31/17 17:39	115-07-1	
Styrene	ND	ug/m3	39.4	45.25		10/31/17 17:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	31.6	45.25		10/31/17 17:39	79-34-5	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10407984

Sample: Cell 2 AS Off Gas **Lab ID: 10407984008** Collected: 10/18/17 11:25 Received: 10/20/17 09:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrachloroethene	ND	ug/m3	31.2	45.25		10/31/17 17:39	127-18-4	
Tetrahydrofuran	ND	ug/m3	27.2	45.25		10/31/17 17:39	109-99-9	
Toluene	**633000**	ug/m3	8920	11583.77		11/01/17 11:39	108-88-3	A3
1,2,4-Trichlorobenzene	ND	ug/m3	171	45.25		10/31/17 17:39	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	50.2	45.25		10/31/17 17:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	24.9	45.25		10/31/17 17:39	79-00-5	
Trichloroethene	ND	ug/m3	24.9	45.25		10/31/17 17:39	79-01-6	
Trichlorofluoromethane	ND	ug/m3	51.6	45.25		10/31/17 17:39	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	72.4	45.25		10/31/17 17:39	76-13-1	
1,2,4-Trimethylbenzene	**1350**	ug/m3	45.2	45.25		10/31/17 17:39	95-63-6	
1,3,5-Trimethylbenzene	**799**	ug/m3	45.2	45.25		10/31/17 17:39	108-67-8	
Vinyl acetate	ND	ug/m3	32.4	45.25		10/31/17 17:39	108-05-4	
Vinyl chloride	ND	ug/m3	11.8	45.25		10/31/17 17:39	75-01-4	
m&p-Xylene	**133000**	ug/m3	20500	11583.77		11/01/17 11:39	179601-23-1	A3
o-Xylene	**45700**	ug/m3	10200	11583.77		11/01/17 11:39	95-47-6	A3

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QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10407984

QC Batch: 505209 | Analysis Method: TO-15
QC Batch Method: TO-15 | Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10407984001, 10407984002, 10407984003, 10407984004, 10407984005, 10407984006, 10407984007

METHOD BLANK: 2746221 | Matrix: Air
Associated Lab Samples: 10407984001, 10407984002, 10407984003, 10407984004, 10407984005, 10407984006, 10407984007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	10/28/17 11:27	
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.70	10/28/17 11:27	
1,1,2-Trichloroethane	ug/m3	ND	0.55	10/28/17 11:27	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	10/28/17 11:27	
1,1-Dichloroethane	ug/m3	ND	0.82	10/28/17 11:27	
1,1-Dichloroethene	ug/m3	ND	0.81	10/28/17 11:27	
1,2,4-Trichlorobenzene	ug/m3	ND	3.8	10/28/17 11:27	
1,2,4-Trimethylbenzene	ug/m3	ND	1.0	10/28/17 11:27	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	10/28/17 11:27	
1,2-Dichlorobenzene	ug/m3	ND	1.2	10/28/17 11:27	
1,2-Dichloroethane	ug/m3	ND	0.41	10/28/17 11:27	
1,2-Dichloropropane	ug/m3	ND	0.94	10/28/17 11:27	
1,3,5-Trimethylbenzene	ug/m3	ND	1.0	10/28/17 11:27	
1,3-Butadiene	ug/m3	ND	0.45	10/28/17 11:27	
1,3-Dichlorobenzene	ug/m3	ND	1.2	10/28/17 11:27	
1,4-Dichlorobenzene	ug/m3	ND	1.2	10/28/17 11:27	
2-Butanone (MEK)	ug/m3	ND	3.0	10/28/17 11:27	
2-Hexanone	ug/m3	ND	4.2	10/28/17 11:27	
2-Propanol	ug/m3	ND	2.5	10/28/17 11:27	
4-Ethyltoluene	ug/m3	ND	1.0	10/28/17 11:27	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	4.2	10/28/17 11:27	
Acetone	ug/m3	ND	2.4	10/28/17 11:27	
Benzene	ug/m3	ND	0.32	10/28/17 11:27	
Benzyl chloride	ug/m3	ND	1.0	10/28/17 11:27	
Bromodichloromethane	ug/m3	ND	1.4	10/28/17 11:27	
Bromoform	ug/m3	ND	2.1	10/28/17 11:27	
Bromomethane	ug/m3	ND	0.79	10/28/17 11:27	
Carbon disulfide	ug/m3	ND	0.63	10/28/17 11:27	
Carbon tetrachloride	ug/m3	ND	0.64	10/28/17 11:27	
Chlorobenzene	ug/m3	ND	0.94	10/28/17 11:27	
Chloroethane	ug/m3	ND	0.54	10/28/17 11:27	
Chloroform	ug/m3	ND	0.50	10/28/17 11:27	
Chloromethane	ug/m3	ND	0.42	10/28/17 11:27	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	10/28/17 11:27	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	10/28/17 11:27	
Cyclohexane	ug/m3	ND	0.70	10/28/17 11:27	
Dibromochloromethane	ug/m3	ND	1.7	10/28/17 11:27	
Dichlorodifluoromethane	ug/m3	ND	1.0	10/28/17 11:27	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	10/28/17 11:27	
Ethanol	ug/m3	ND	0.96	10/28/17 11:27	
Ethyl acetate	ug/m3	ND	0.73	10/28/17 11:27	

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QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10407984

METHOD BLANK: 2746221 Matrix: Air
Associated Lab Samples: 10407984001, 10407984002, 10407984003, 10407984004, 10407984005, 10407984006, 10407984007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/m3	ND	0.88	10/28/17 11:27	
Hexachloro-1,3-butadiene	ug/m3	ND	2.2	10/28/17 11:27	
m&p-Xylene	ug/m3	ND	1.8	10/28/17 11:27	
Methyl-tert-butyl ether	ug/m3	ND	3.7	10/28/17 11:27	
Methylene Chloride	ug/m3	ND	3.5	10/28/17 11:27	
n-Heptane	ug/m3	ND	0.83	10/28/17 11:27	
n-Hexane	ug/m3	ND	0.72	10/28/17 11:27	
Naphthalene	ug/m3	ND	2.7	10/28/17 11:27	
o-Xylene	ug/m3	ND	0.88	10/28/17 11:27	
Propylene	ug/m3	ND	0.35	10/28/17 11:27	
Styrene	ug/m3	ND	0.87	10/28/17 11:27	
Tetrachloroethene	ug/m3	ND	0.69	10/28/17 11:27	
Tetrahydrofuran	ug/m3	ND	0.60	10/28/17 11:27	
Toluene	ug/m3	ND	0.77	10/28/17 11:27	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	10/28/17 11:27	
trans-1,3-Dichloropropene	ug/m3	ND	0.92	10/28/17 11:27	
Trichloroethene	ug/m3	ND	0.55	10/28/17 11:27	
Trichlorofluoromethane	ug/m3	ND	1.1	10/28/17 11:27	
Vinyl acetate	ug/m3	ND	0.72	10/28/17 11:27	
Vinyl chloride	ug/m3	ND	0.26	10/28/17 11:27	

LABORATORY CONTROL SAMPLE: 2746222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	55.9	101	70-134	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	73.6	106	70-130	
1,1,2-Trichloroethane	ug/m3	55.5	56.7	102	70-130	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	77.6	100	70-130	
1,1-Dichloroethane	ug/m3	41.1	41.9	102	70-130	
1,1-Dichloroethene	ug/m3	40.3	41.6	103	70-130	
1,2,4-Trichlorobenzene	ug/m3	75.4	65.4	87	60-150	
1,2,4-Trimethylbenzene	ug/m3	50	49.0	98	70-136	
1,2-Dibromoethane (EDB)	ug/m3	78.1	80.2	103	70-130	
1,2-Dichlorobenzene	ug/m3	61.1	57.1	94	70-139	
1,2-Dichloroethane	ug/m3	41.1	42.1	102	70-130	
1,2-Dichloropropane	ug/m3	47	48.5	103	70-131	
1,3,5-Trimethylbenzene	ug/m3	50	49.4	99	70-133	
1,3-Butadiene	ug/m3	22.5	22.5	100	70-130	
1,3-Dichlorobenzene	ug/m3	61.1	57.6	94	70-144	
1,4-Dichlorobenzene	ug/m3	61.1	56.8	93	70-139	
2-Butanone (MEK)	ug/m3	30	32.2	107	70-130	
2-Hexanone	ug/m3	104	106	102	70-138	
2-Propanol	ug/m3	125	113	90	70-130	
4-Ethyltoluene	ug/m3	50	50.0	100	70-135	

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QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10407984

LABORATORY CONTROL SAMPLE: 2746222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Methyl-2-pentanone (MIBK)	ug/m3	104	103	99	70-130	
Acetone	ug/m3	121	105	87	64-130	
Benzene	ug/m3	32.5	32.6	100	70-130	
Benzyl chloride	ug/m3	52.6	60.3	115	70-144	
Bromodichloromethane	ug/m3	68.1	71.6	105	70-134	
Bromoform	ug/m3	105	111	106	70-150	
Bromomethane	ug/m3	39.5	36.6	93	70-130	
Carbon disulfide	ug/m3	31.6	32.1	101	70-134	
Carbon tetrachloride	ug/m3	64	69.6	109	68-150	
Chlorobenzene	ug/m3	46.8	46.6	100	70-132	
Chloroethane	ug/m3	26.8	26.6	99	70-132	
Chloroform	ug/m3	49.6	49.1	99	70-130	
Chloromethane	ug/m3	21	20.4	97	70-130	
cis-1,2-Dichloroethene	ug/m3	40.3	40.9	101	70-133	
cis-1,3-Dichloropropene	ug/m3	46.1	49.0	106	70-137	
Cyclohexane	ug/m3	35	35.9	103	70-130	
Dibromochloromethane	ug/m3	86.6	98.7	114	70-144	
Dichlorodifluoromethane	ug/m3	50.3	51.5	103	70-130	
Dichlorotetrafluoroethane	ug/m3	71	65.4	92	70-130	
Ethanol	ug/m3	91.6	90.5	99	70-136	
Ethyl acetate	ug/m3	36.6	38.3	105	70-130	
Ethylbenzene	ug/m3	44.1	44.6	101	70-134	
Hexachloro-1,3-butadiene	ug/m3	108	95.3	88	45-150	
m&p-Xylene	ug/m3	88.3	88.0	100	70-130	
Methyl-tert-butyl ether	ug/m3	91.6	90.5	99	66-148	
Methylene Chloride	ug/m3	177	165	93	67-133	
n-Heptane	ug/m3	41.6	42.5	102	70-130	
n-Hexane	ug/m3	35.8	36.4	102	67-132	
Naphthalene	ug/m3	53.3	44.3	83	53-150	
o-Xylene	ug/m3	44.1	43.6	99	70-130	
Propylene	ug/m3	17.5	18.3	105	70-135	
Styrene	ug/m3	43.3	47.1	109	70-139	
Tetrachloroethene	ug/m3	68.9	67.2	98	70-130	
Tetrahydrofuran	ug/m3	30	31.8	106	70-130	
Toluene	ug/m3	38.3	37.3	97	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	40.3	100	70-131	
trans-1,3-Dichloropropene	ug/m3	46.1	50.5	110	70-142	
Trichloroethene	ug/m3	54.6	53.4	98	70-130	
Trichlorofluoromethane	ug/m3	57.1	49.7	87	70-130	
Vinyl acetate	ug/m3	35.8	41.2	115	70-137	
Vinyl chloride	ug/m3	26	25.6	98	70-130	

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QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10407984

SAMPLE DUPLICATE: 2746540

Parameter	Units	10407222001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND		25	
1,1,2-Trichloroethane	ug/m3	ND	ND		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	0.52J	.54J		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
1,2,4-Trichlorobenzene	ug/m3	ND	ND		25	
1,2,4-Trimethylbenzene	ug/m3	0.59J	.62J		25	
1,2-Dibromoethane (EDB)	ug/m3	ND	ND		25	
1,2-Dichlorobenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,2-Dichloropropane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	ND	ND		25	
1,3-Butadiene	ug/m3	ND	ND		25	
1,3-Dichlorobenzene	ug/m3	ND	ND		25	
1,4-Dichlorobenzene	ug/m3	ND	ND		25	
2-Butanone (MEK)	ug/m3	3.3	3.5	6	25	
2-Hexanone	ug/m3	ND	ND		25	
2-Propanol	ug/m3	ND	ND		25	
4-Ethyltoluene	ug/m3	ND	ND		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	ND		25	
Acetone	ug/m3	8.0	8.4	4	25	
Benzene	ug/m3	0.59	0.61	3	25	
Benzyl chloride	ug/m3	ND	ND		25	
Bromodichloromethane	ug/m3	ND	ND		25	
Bromoform	ug/m3	ND	ND		25	
Bromomethane	ug/m3	ND	ND		25	
Carbon disulfide	ug/m3	ND	ND		25	
Carbon tetrachloride	ug/m3	0.47J	.47J		25	
Chlorobenzene	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
Chloroform	ug/m3	ND	ND		25	
Chloromethane	ug/m3	0.85	0.85	0	25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
cis-1,3-Dichloropropene	ug/m3	ND	ND		25	
Cyclohexane	ug/m3	0.44J	.45J		25	
Dibromochloromethane	ug/m3	ND	ND		25	
Dichlorodifluoromethane	ug/m3	2.0	2.0	2	25	
Dichlorotetrafluoroethane	ug/m3	ND	ND		25	
Ethanol	ug/m3	8.3	8.7	5	25	
Ethyl acetate	ug/m3	ND	ND		25	
Ethylbenzene	ug/m3	0.47J	.47J		25	
Hexachloro-1,3-butadiene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	1.5J	1.5J		25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	ND	ND		25	
n-Heptane	ug/m3	0.57J	.61J		25	

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QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10407984

SAMPLE DUPLICATE: 2746540

Parameter	Units	10407222001 Result	Dup Result	RPD	Max RPD	Qualifiers
n-Hexane	ug/m3	1.1	1.2	4	25	
Naphthalene	ug/m3	ND	ND		25	
o-Xylene	ug/m3	0.59J	.61J		25	
Propylene	ug/m3	ND	ND		25	
Styrene	ug/m3	1.7	1.8	2	25	
Tetrachloroethene	ug/m3	ND	ND		25	
Tetrahydrofuran	ug/m3	ND	ND		25	
Toluene	ug/m3	2.3	2.3	2	25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
trans-1,3-Dichloropropene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Trichlorofluoromethane	ug/m3	1.1J	1.2		25	
Vinyl acetate	ug/m3	0.94	0.98	4	25	
Vinyl chloride	ug/m3	ND	ND		25	

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QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10407984

QC Batch: 505626
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10407984008

METHOD BLANK: 2748530
Matrix: Air
Associated Lab Samples: 10407984008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	10/31/17 11:44	
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.70	10/31/17 11:44	
1,1,2-Trichloroethane	ug/m3	ND	0.55	10/31/17 11:44	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	10/31/17 11:44	
1,1-Dichloroethane	ug/m3	ND	0.82	10/31/17 11:44	
1,1-Dichloroethene	ug/m3	ND	0.81	10/31/17 11:44	
1,2,4-Trichlorobenzene	ug/m3	ND	3.8	10/31/17 11:44	
1,2,4-Trimethylbenzene	ug/m3	ND	1.0	10/31/17 11:44	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	10/31/17 11:44	
1,2-Dichlorobenzene	ug/m3	ND	1.2	10/31/17 11:44	
1,2-Dichloroethane	ug/m3	ND	0.41	10/31/17 11:44	
1,2-Dichloropropane	ug/m3	ND	0.94	10/31/17 11:44	
1,3,5-Trimethylbenzene	ug/m3	ND	1.0	10/31/17 11:44	
1,3-Butadiene	ug/m3	ND	0.45	10/31/17 11:44	
1,3-Dichlorobenzene	ug/m3	ND	1.2	10/31/17 11:44	
1,4-Dichlorobenzene	ug/m3	ND	1.2	10/31/17 11:44	
2-Butanone (MEK)	ug/m3	ND	3.0	10/31/17 11:44	
2-Hexanone	ug/m3	ND	4.2	10/31/17 11:44	
2-Propanol	ug/m3	ND	2.5	10/31/17 11:44	
4-Ethyltoluene	ug/m3	ND	1.0	10/31/17 11:44	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	4.2	10/31/17 11:44	
Acetone	ug/m3	ND	2.4	10/31/17 11:44	
Benzene	ug/m3	ND	0.32	10/31/17 11:44	
Benzyl chloride	ug/m3	ND	1.0	10/31/17 11:44	
Bromodichloromethane	ug/m3	ND	1.4	10/31/17 11:44	
Bromoform	ug/m3	ND	2.1	10/31/17 11:44	
Bromomethane	ug/m3	ND	0.79	10/31/17 11:44	
Carbon disulfide	ug/m3	ND	0.63	10/31/17 11:44	
Carbon tetrachloride	ug/m3	ND	0.64	10/31/17 11:44	
Chlorobenzene	ug/m3	ND	0.94	10/31/17 11:44	
Chloroethane	ug/m3	ND	0.54	10/31/17 11:44	
Chloroform	ug/m3	ND	0.50	10/31/17 11:44	
Chloromethane	ug/m3	ND	0.42	10/31/17 11:44	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	10/31/17 11:44	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	10/31/17 11:44	
Cyclohexane	ug/m3	ND	0.70	10/31/17 11:44	
Dibromochloromethane	ug/m3	ND	1.7	10/31/17 11:44	
Dichlorodifluoromethane	ug/m3	ND	1.0	10/31/17 11:44	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	10/31/17 11:44	
Ethanol	ug/m3	ND	0.96	10/31/17 11:44	
Ethyl acetate	ug/m3	ND	0.73	10/31/17 11:44	

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QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10407984

METHOD BLANK: 2748530 Matrix: Air
Associated Lab Samples: 10407984008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/m3	ND	0.88	10/31/17 11:44	
Hexachloro-1,3-butadiene	ug/m3	ND	2.2	10/31/17 11:44	
m&p-Xylene	ug/m3	ND	1.8	10/31/17 11:44	
Methyl-tert-butyl ether	ug/m3	ND	3.7	10/31/17 11:44	
Methylene Chloride	ug/m3	ND	3.5	10/31/17 11:44	
n-Heptane	ug/m3	ND	0.83	10/31/17 11:44	
n-Hexane	ug/m3	ND	0.72	10/31/17 11:44	
Naphthalene	ug/m3	ND	2.7	10/31/17 11:44	
o-Xylene	ug/m3	ND	0.88	10/31/17 11:44	
Propylene	ug/m3	ND	0.35	10/31/17 11:44	
Styrene	ug/m3	ND	0.87	10/31/17 11:44	
Tetrachloroethene	ug/m3	ND	0.69	10/31/17 11:44	
Tetrahydrofuran	ug/m3	ND	0.60	10/31/17 11:44	
Toluene	ug/m3	ND	0.77	10/31/17 11:44	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	10/31/17 11:44	
trans-1,3-Dichloropropene	ug/m3	ND	0.92	10/31/17 11:44	
Trichloroethene	ug/m3	ND	0.55	10/31/17 11:44	
Trichlorofluoromethane	ug/m3	ND	1.1	10/31/17 11:44	
Vinyl acetate	ug/m3	ND	0.72	10/31/17 11:44	
Vinyl chloride	ug/m3	ND	0.26	10/31/17 11:44	

LABORATORY CONTROL SAMPLE: 2748531

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	57.9	104	70-134	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	75.3	108	70-130	
1,1,2-Trichloroethane	ug/m3	55.5	58.1	105	70-130	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	79.7	102	70-130	
1,1-Dichloroethane	ug/m3	41.1	43.1	105	70-130	
1,1-Dichloroethene	ug/m3	40.3	42.6	106	70-130	
1,2,4-Trichlorobenzene	ug/m3	75.4	66.7	88	60-150	
1,2,4-Trimethylbenzene	ug/m3	50	50.9	102	70-136	
1,2-Dibromoethane (EDB)	ug/m3	78.1	82.2	105	70-130	
1,2-Dichlorobenzene	ug/m3	61.1	59.4	97	70-139	
1,2-Dichloroethane	ug/m3	41.1	43.8	106	70-130	
1,2-Dichloropropane	ug/m3	47	50.1	107	70-131	
1,3,5-Trimethylbenzene	ug/m3	50	51.0	102	70-133	
1,3-Butadiene	ug/m3	22.5	21.6	96	70-130	
1,3-Dichlorobenzene	ug/m3	61.1	59.3	97	70-144	
1,4-Dichlorobenzene	ug/m3	61.1	58.8	96	70-139	
2-Butanone (MEK)	ug/m3	30	33.0	110	70-130	
2-Hexanone	ug/m3	104	109	105	70-138	
2-Propanol	ug/m3	125	117	93	70-130	
4-Ethyltoluene	ug/m3	50	51.6	103	70-135	

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.

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10407984

LABORATORY CONTROL SAMPLE: 2748531

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Methyl-2-pentanone (MIBK)	ug/m3	104	107	102	70-130	
Acetone	ug/m3	121	107	89	64-130	
Benzene	ug/m3	32.5	33.6	104	70-130	
Benzyl chloride	ug/m3	52.6	63.7	121	70-144	
Bromodichloromethane	ug/m3	68.1	74.0	109	70-134	
Bromoform	ug/m3	105	117	111	70-150	
Bromomethane	ug/m3	39.5	37.3	95	70-130	
Carbon disulfide	ug/m3	31.6	32.9	104	70-134	
Carbon tetrachloride	ug/m3	64	72.0	113	68-150	
Chlorobenzene	ug/m3	46.8	47.8	102	70-132	
Chloroethane	ug/m3	26.8	26.9	100	70-132	
Chloroform	ug/m3	49.6	50.6	102	70-130	
Chloromethane	ug/m3	21	19.2	91	70-130	
cis-1,2-Dichloroethene	ug/m3	40.3	41.8	104	70-133	
cis-1,3-Dichloropropene	ug/m3	46.1	50.8	110	70-137	
Cyclohexane	ug/m3	35	37.3	107	70-130	
Dibromochloromethane	ug/m3	86.6	102	118	70-144	
Dichlorodifluoromethane	ug/m3	50.3	52.6	105	70-130	
Dichlorotetrafluoroethane	ug/m3	71	63.5	89	70-130	
Ethanol	ug/m3	91.6	90.0	98	70-136	
Ethyl acetate	ug/m3	36.6	39.6	108	70-130	
Ethylbenzene	ug/m3	44.1	45.7	103	70-134	
Hexachloro-1,3-butadiene	ug/m3	108	98.6	91	45-150	
m&p-Xylene	ug/m3	88.3	90.2	102	70-130	
Methyl-tert-butyl ether	ug/m3	91.6	93.7	102	66-148	
Methylene Chloride	ug/m3	177	171	97	67-133	
n-Heptane	ug/m3	41.6	44.2	106	70-130	
n-Hexane	ug/m3	35.8	37.3	104	67-132	
Naphthalene	ug/m3	53.3	45.7	86	53-150	
o-Xylene	ug/m3	44.1	44.9	102	70-130	
Propylene	ug/m3	17.5	28.6	164	70-135	CH,L1
Styrene	ug/m3	43.3	48.4	112	70-139	
Tetrachloroethene	ug/m3	68.9	68.9	100	70-130	
Tetrahydrofuran	ug/m3	30	33.1	110	70-130	
Toluene	ug/m3	38.3	38.4	100	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	41.2	102	70-131	
trans-1,3-Dichloropropene	ug/m3	46.1	52.7	114	70-142	
Trichloroethene	ug/m3	54.6	55.2	101	70-130	
Trichlorofluoromethane	ug/m3	57.1	51.3	90	70-130	
Vinyl acetate	ug/m3	35.8	42.7	119	70-137	
Vinyl chloride	ug/m3	26	24.6	95	70-130	

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.

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(612)607-1700

QUALIFIERS

Project: Sparrows Point
Pace Project No.: 10407984

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.

SAMPLE QUALIFIERS

Sample: 10407984006

[1]	The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

ANALYTE QUALIFIERS

A3	The sample was analyzed by serial dilution.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sparrows Point
Pace Project No.: 10407984

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10407984001	**Cell 5 AS Off Gas**	TO-15	505209		
10407984002	**Cell 5 INF**	TO-15	505209		
10407984003	**Cell 3**	TO-15	505209		
10407984004	**Cell 1**	TO-15	505209		
10407984005	**Cell 6 Oxidizer**	TO-15	505209		
10407984006	**Cell 6 Blower**	TO-15	505209		
10407984007	**Cell 2 SVE**	TO-15	505209		
10407984008	**Cell 2 AS Off Gas**	TO-15	505626		

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10407984

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www.pacelabs.com

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

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

29800

Page: 1 of 1

Section A Required Client Information:
Company: Enviro Analytics Group
Address: 1600 Sparrows Point Blvd st. 82, Sparrows Point, MD 21219
Email To: James + Josh
Phone: Fax:
Requested Due Date/TAT: STD

Section B Required Project Information:
Report To: Josh Burke
Copy To: James Calendar
Purchase Order No.:
Project Name:
Project Number:

Section C Invoice Information:
Attention: Laura Sargent
Company Name: Enviro Analytics Group
Address: 1650 Des Peres Rd, Suite 303, St. Louis, MO 63131
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #: 34460

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other X

Location of Sampling by State: MD

Reporting Units: ug/m³ X mg/m³ X PPBV ___ PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other___

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	'Section D Required Client Information AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED Composite Start Date	Composite Start Time	Composite - End/Grab Date	Composite - End/Grab Time	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	Cell 5 AS Off Gas	6LC		10-18-17	0915			-15		2807						X					001
2	Cell 5 INF	↓		↓	0920			-15		679						X					002
3	Cell 3				0955			-10		2840						X					003
4	Cell 1				1015			-5		843						X					004
5	Cell 6 Oxidizer				1050			-10		1581						X					005
6	Cell 6 Blower				1045			-15		1234						X					006
7	Cell 2 SVE				1120			-20		114						X					007
8	Cell 2 AS Off Gas	↓		↓	1125			-10		109						X					008
9																					
10																					
11																					
12																					

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Jeff Wilson	10-18-17	1200	PACE	10/20/17	950

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jeff Wilson
SIGNATURE of SAMPLER: Jeff Wilson
DATE Signed (MM / DD / YY): 10/18/17

SAMPLE CONDITIONS			
AMB	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact

ORIGINAL

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

FC046Rev.01, 03Feb2010

Pace Analytical	Document Name: Air Sample Condition Upon Receipt	Document Revised: 16Oct2017 Page 1 of 1
	Document No.: F-MN-A-106-rev.13	Issuing Authority: Pace Minnesota Quality Office

Air Sample Condition Upon Receipt

Client Name: Enviro Analytics Group

Project #: WO# : 10407984

10407984

Courier: ☑ Fed Ex E ☐ UPS ☐ Speedee ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: 7476 3002 4380, 4379

Custody Seal on Cooler/Box Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Tin Can ☐ Other: **Temp Blank rec:** ☐ Yes ☑ No

Temp. (TO17 and TO13 samples only) (°C): — **Corrected Temp (°C):** — **Thermom. Used:** ☐ 151401163 ☐ G87A9155100842

Temp should be above freezing to 6°C **Correction Factor:** — **Date & Initials of Person Examining Contents:** MDJ 10/20/17

Type of ice Received ☐ Blue ☐ Wet ☑ None

Comments:

Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Media: (Air Can) Airbag Filter TDT Passive				11. Individually Certified Cans Y (N) (list which samples)
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	12.

Samples Received: NO FL'S

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
Cell 5 AS offgas			+1	+5					
Cell 5 INF			+2	"					
Cell 3			0	"					
Cell 1			+1	"					
Cell 6 Oxidizer			+1	"					
Cell 6 Blower			+2	"					
Cell 2 SVE			0	"					
Cell 2 AS OFFgas			+1	"					

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Nathan Roberg **Date:** 10/20/17

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984001
Client Sample ID: Cell 5 AS Off Gas

ProjSampleNum: 10407984001
Matrix: Air

Date Collected: 10/18/17 9:15
Date Received: 10/20/17 9:50

Air

TO-15

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
1,1,1-Trichloroethane	ND	mg/m3	0.0014	1.26	10/28/17 22:14	MJL	71-55-6	
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.00088	1.26	10/28/17 22:14	MJL	79-34-5	
1,1,2-Trichloroethane	ND	mg/m3	0.00069	1.26	10/28/17 22:14	MJL	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	mg/m3	0.002	1.26	10/28/17 22:14	MJL	76-13-1	
1,1-Dichloroethane	0.0035	mg/m3	0.001	1.26	10/28/17 22:14	MJL	75-34-3	
1,1-Dichloroethene	ND	mg/m3	0.001	1.26	10/28/17 22:14	MJL	75-35-4	
1,2,4-Trichlorobenzene	ND	mg/m3	0.0048	1.26	10/28/17 22:14	MJL	120-82-1	
1,2,4-Trimethylbenzene	1.5	mg/m3	0.063	63	10/29/17 18:35	MJL	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/m3	0.002	1.26	10/28/17 22:14	MJL	106-93-4	
1,2-Dichlorobenzene	ND	mg/m3	0.0015	1.26	10/28/17 22:14	MJL	95-50-1	
1,2-Dichloroethane	ND	mg/m3	0.00052	1.26	10/28/17 22:14	MJL	107-06-2	
1,2-Dichloropropane	ND	mg/m3	0.0012	1.26	10/28/17 22:14	MJL	78-87-5	
1,3,5-Trimethylbenzene	0.73	mg/m3	0.063	63	10/29/17 18:35	MJL	108-67-8	
1,3-Butadiene	ND	mg/m3	0.00057	1.26	10/28/17 22:14	MJL	106-99-0	
1,3-Dichlorobenzene	ND	mg/m3	0.0015	1.26	10/28/17 22:14	MJL	541-73-1	
1,4-Dichlorobenzene	ND	mg/m3	0.0015	1.26	10/28/17 22:14	MJL	106-46-7	
2-Butanone (MEK)	0.011	mg/m3	0.0038	1.26	10/28/17 22:14	MJL	78-93-3	
2-Hexanone	ND	mg/m3	0.0052	1.26	10/28/17 22:14	MJL	591-78-6	
2-Propanol	0.0035	mg/m3	0.0032	1.26	10/28/17 22:14	MJL	67-63-0	
4-Ethyltoluene	0.049	mg/m3	0.0013	1.26	10/28/17 22:14	MJL	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	mg/m3	0.0052	1.26	10/28/17 22:14	MJL	108-10-1	
Acetone	0.022	mg/m3	0.003	1.26	10/28/17 22:14	MJL	67-64-1	
Benzene	116	mg/m3	0.52	1612.8	10/30/17 10:45	MJL	71-43-2	A3
Benzyl chloride	ND	mg/m3	0.0013	1.26	10/28/17 22:14	MJL	100-44-7	
Bromodichloromethane	ND	mg/m3	0.0017	1.26	10/28/17 22:14	MJL	75-27-4	
Bromoform	ND	mg/m3	0.0026	1.26	10/28/17 22:14	MJL	75-25-2	
Bromomethane	ND	mg/m3	0.001	1.26	10/28/17 22:14	MJL	74-83-9	
Carbon disulfide	0.00088	mg/m3	0.00079	1.26	10/28/17 22:14	MJL	75-15-0	
Carbon tetrachloride	ND	mg/m3	0.00081	1.26	10/28/17 22:14	MJL	56-23-5	
Chlorobenzene	0.0044	mg/m3	0.0012	1.26	10/28/17 22:14	MJL	108-90-7	
Chloroethane	ND	mg/m3	0.00068	1.26	10/28/17 22:14	MJL	75-00-3	
Chloroform	ND	mg/m3	0.00062	1.26	10/28/17 22:14	MJL	67-66-3	
Chloromethane	0.00093	mg/m3	0.00053	1.26	10/28/17 22:14	MJL	74-87-3	
cis-1,2-Dichloroethene	ND	mg/m3	0.001	1.26	10/28/17 22:14	MJL	156-59-2	
cis-1,3-Dichloropropene	ND	mg/m3	0.0012	1.26	10/28/17 22:14	MJL	10061-01-5	
Cyclohexane	0.0032	mg/m3	0.00088	1.26	10/28/17 22:14	MJL	110-82-7	
Dibromochloromethane	ND	mg/m3	0.0022	1.26	10/28/17 22:14	MJL	124-48-1	
Dichlorodifluoromethane	0.0025	mg/m3	0.0013	1.26	10/28/17 22:14	MJL	75-71-8	

SUPPLEMENTAL REPORT

Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984001
Client Sample ID: Cell 5 AS Off Gas

ProjSampleNum: 10407984001
Matrix: Air

Date Collected: 10/18/17 9:15
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
Dichlorotetrafluoroethane	ND	mg/m3	0.0018	1.26	10/28/17 22:14	MJL	76-14-2	
Ethanol	0.03	mg/m3	0.0012	1.26	10/28/17 22:14	MJL	64-17-5	
Ethyl acetate	ND	mg/m3	0.00092	1.26	10/28/17 22:14	MJL	141-78-6	
Ethylbenzene	0.45	mg/m3	0.055	63	10/29/17 18:35	MJL	100-41-4	
Hexachloro-1,3-butadiene	ND	mg/m3	0.0027	1.26	10/28/17 22:14	MJL	87-68-3	
m&p-Xylene	6.2	mg/m3	0.11	63	10/29/17 18:35	MJL	179601-23-1	
Methylene Chloride	ND	mg/m3	0.0044	1.26	10/28/17 22:14	MJL	75-09-2	
Methyl-tert-butyl ether	ND	mg/m3	0.0046	1.26	10/28/17 22:14	MJL	1634-04-4	
Naphthalene	197	mg/m3	4.3	1612.8	10/30/17 10:45	MJL	91-20-3	A3
n-Heptane	0.0052	mg/m3	0.001	1.26	10/28/17 22:14	MJL	142-82-5	
n-Hexane	0.0049	mg/m3	0.00091	1.26	10/28/17 22:14	MJL	110-54-3	
o-Xylene	2.4	mg/m3	0.055	63	10/29/17 18:35	MJL	95-47-6	
Propylene	ND	mg/m3	0.00044	1.26	10/28/17 22:14	MJL	115-07-1	
Styrene	2	mg/m3	0.055	63	10/29/17 18:35	MJL	100-42-5	
Tetrachloroethene	ND	mg/m3	0.00087	1.26	10/28/17 22:14	MJL	127-18-4	
Tetrahydrofuran	0.0013	mg/m3	0.00076	1.26	10/28/17 22:14	MJL	109-99-9	
Toluene	5	mg/m3	0.048	63	10/29/17 18:35	MJL	108-88-3	
trans-1,2-Dichloroethene	ND	mg/m3	0.001	1.26	10/28/17 22:14	MJL	156-60-5	
trans-1,3-Dichloropropene	ND	mg/m3	0.0012	1.26	10/28/17 22:14	MJL	10061-02-6	
Trichloroethene	0.00096	mg/m3	0.00069	1.26	10/28/17 22:14	MJL	79-01-6	
Trichlorofluoromethane	ND	mg/m3	0.0014	1.26	10/28/17 22:14	MJL	75-69-4	
Vinyl acetate	ND	mg/m3	0.0009	1.26	10/28/17 22:14	MJL	108-05-4	
Vinyl chloride	ND	mg/m3	0.00033	1.26	10/28/17 22:14	MJL	75-01-4	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984002
Client Sample ID: Cell 5 INF

ProjSampleNum: 10407984002
Matrix: Air

Date Collected: 10/18/17 9:20
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
TO-15								
1,1,1-Trichloroethane	ND	mg/m3	0.0013	1.18	10/28/17 23:26	MJL	71-55-6	
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.00082	1.18	10/28/17 23:26	MJL	79-34-5	
1,1,2-Trichloroethane	ND	mg/m3	0.00065	1.18	10/28/17 23:26	MJL	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	mg/m3	0.0019	1.18	10/28/17 23:26	MJL	76-13-1	
1,1-Dichloroethane	ND	mg/m3	0.00097	1.18	10/28/17 23:26	MJL	75-34-3	
1,1-Dichloroethene	ND	mg/m3	0.00096	1.18	10/28/17 23:26	MJL	75-35-4	
1,2,4-Trichlorobenzene	ND	mg/m3	0.0044	1.18	10/28/17 23:26	MJL	120-82-1	
1,2,4-Trimethylbenzene	0.0012	mg/m3	0.0012	1.18	10/28/17 23:26	MJL	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/m3	0.0018	1.18	10/28/17 23:26	MJL	106-93-4	
1,2-Dichlorobenzene	ND	mg/m3	0.0014	1.18	10/28/17 23:26	MJL	95-50-1	
1,2-Dichloroethane	ND	mg/m3	0.00048	1.18	10/28/17 23:26	MJL	107-06-2	
1,2-Dichloropropane	ND	mg/m3	0.0011	1.18	10/28/17 23:26	MJL	78-87-5	
1,3,5-Trimethylbenzene	ND	mg/m3	0.0012	1.18	10/28/17 23:26	MJL	108-67-8	
1,3-Butadiene	ND	mg/m3	0.00053	1.18	10/28/17 23:26	MJL	106-99-0	
1,3-Dichlorobenzene	ND	mg/m3	0.0014	1.18	10/28/17 23:26	MJL	541-73-1	
1,4-Dichlorobenzene	ND	mg/m3	0.0014	1.18	10/28/17 23:26	MJL	106-46-7	
2-Butanone (MEK)	ND	mg/m3	0.0035	1.18	10/28/17 23:26	MJL	78-93-3	
2-Hexanone	ND	mg/m3	0.0049	1.18	10/28/17 23:26	MJL	591-78-6	
2-Propanol	ND	mg/m3	0.003	1.18	10/28/17 23:26	MJL	67-63-0	
4-Ethyltoluene	ND	mg/m3	0.0012	1.18	10/28/17 23:26	MJL	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	mg/m3	0.0049	1.18	10/28/17 23:26	MJL	108-10-1	
Acetone	0.0065	mg/m3	0.0028	1.18	10/28/17 23:26	MJL	67-64-1	
Benzene	0.0018	mg/m3	0.00038	1.18	10/28/17 23:26	MJL	71-43-2	
Benzyl chloride	ND	mg/m3	0.0012	1.18	10/28/17 23:26	MJL	100-44-7	
Bromodichloromethane	ND	mg/m3	0.0016	1.18	10/28/17 23:26	MJL	75-27-4	
Bromoform	ND	mg/m3	0.0025	1.18	10/28/17 23:26	MJL	75-25-2	
Bromomethane	ND	mg/m3	0.00093	1.18	10/28/17 23:26	MJL	74-83-9	
Carbon disulfide	ND	mg/m3	0.00074	1.18	10/28/17 23:26	MJL	75-15-0	
Carbon tetrachloride	ND	mg/m3	0.00076	1.18	10/28/17 23:26	MJL	56-23-5	
Chlorobenzene	ND	mg/m3	0.0011	1.18	10/28/17 23:26	MJL	108-90-7	
Chloroethane	ND	mg/m3	0.00064	1.18	10/28/17 23:26	MJL	75-00-3	
Chloroform	ND	mg/m3	0.00059	1.18	10/28/17 23:26	MJL	67-66-3	
Chloromethane	0.00086	mg/m3	0.0005	1.18	10/28/17 23:26	MJL	74-87-3	
cis-1,2-Dichloroethene	ND	mg/m3	0.00096	1.18	10/28/17 23:26	MJL	156-59-2	
cis-1,3-Dichloropropene	ND	mg/m3	0.0011	1.18	10/28/17 23:26	MJL	10061-01-5	
Cyclohexane	ND	mg/m3	0.00083	1.18	10/28/17 23:26	MJL	110-82-7	
Dibromochloromethane	ND	mg/m3	0.002	1.18	10/28/17 23:26	MJL	124-48-1	
Dichlorodifluoromethane	0.0019	mg/m3	0.0012	1.18	10/28/17 23:26	MJL	75-71-8	

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984002
Client Sample ID: Cell 5 INF

ProjSampleNum: 10407984002
Matrix: Air

Date Collected: 10/18/17 9:20
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
Dichlorotetrafluoroethane	ND	mg/m3	0.0017	1.18	10/28/17 23:26	MJL	76-14-2	
Ethanol	0.0043	mg/m3	0.0011	1.18	10/28/17 23:26	MJL	64-17-5	
Ethyl acetate	ND	mg/m3	0.00086	1.18	10/28/17 23:26	MJL	141-78-6	
Ethylbenzene	ND	mg/m3	0.001	1.18	10/28/17 23:26	MJL	100-41-4	
Hexachloro-1,3-butadiene	ND	mg/m3	0.0026	1.18	10/28/17 23:26	MJL	87-68-3	
m&p-Xylene	0.0025	mg/m3	0.0021	1.18	10/28/17 23:26	MJL	179601-23-1	
Methylene Chloride	ND	mg/m3	0.0042	1.18	10/28/17 23:26	MJL	75-09-2	
Methyl-tert-butyl ether	ND	mg/m3	0.0043	1.18	10/28/17 23:26	MJL	1634-04-4	
Naphthalene	0.012	mg/m3	0.0031	1.18	10/29/17 17:29	MJL	91-20-3	
n-Heptane	ND	mg/m3	0.00098	1.18	10/28/17 23:26	MJL	142-82-5	
n-Hexane	0.00094	mg/m3	0.00085	1.18	10/28/17 23:26	MJL	110-54-3	
o-Xylene	0.0011	mg/m3	0.001	1.18	10/28/17 23:26	MJL	95-47-6	
Propylene	ND	mg/m3	0.00041	1.18	10/28/17 23:26	MJL	115-07-1	
Styrene	ND	mg/m3	0.001	1.18	10/28/17 23:26	MJL	100-42-5	
Tetrachloroethene	ND	mg/m3	0.00081	1.18	10/28/17 23:26	MJL	127-18-4	
Tetrahydrofuran	ND	mg/m3	0.00071	1.18	10/28/17 23:26	MJL	109-99-9	
Toluene	0.0028	mg/m3	0.00091	1.18	10/28/17 23:26	MJL	108-88-3	
trans-1,2-Dichloroethene	ND	mg/m3	0.00096	1.18	10/28/17 23:26	MJL	156-60-5	
trans-1,3-Dichloropropene	ND	mg/m3	0.0011	1.18	10/28/17 23:26	MJL	10061-02-6	
Trichloroethene	ND	mg/m3	0.00065	1.18	10/28/17 23:26	MJL	79-01-6	
Trichlorofluoromethane	ND	mg/m3	0.0013	1.18	10/28/17 23:26	MJL	75-69-4	
Vinyl acetate	0.0015	mg/m3	0.00084	1.18	10/28/17 23:26	MJL	108-05-4	
Vinyl chloride	ND	mg/m3	0.00031	1.18	10/28/17 23:26	MJL	75-01-4	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984003
Client Sample ID: Cell 3

ProjSampleNum: 10407984003
Matrix: Air

Date Collected: 10/18/17 9:55
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
TO-15								
1,1,1-Trichloroethane	ND	mg/m3	0.0015	1.34	10/29/17 0:04	MJL	71-55-6	
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.00094	1.34	10/29/17 0:04	MJL	79-34-5	
1,1,2-Trichloroethane	ND	mg/m3	0.00074	1.34	10/29/17 0:04	MJL	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	mg/m3	0.0021	1.34	10/29/17 0:04	MJL	76-13-1	
1,1-Dichloroethane	ND	mg/m3	0.0011	1.34	10/29/17 0:04	MJL	75-34-3	
1,1-Dichloroethene	ND	mg/m3	0.0011	1.34	10/29/17 0:04	MJL	75-35-4	
1,2,4-Trichlorobenzene	ND	mg/m3	0.0051	1.34	10/29/17 0:04	MJL	120-82-1	
1,2,4-Trimethylbenzene	0.0024	mg/m3	0.0013	1.34	10/29/17 0:04	MJL	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/m3	0.0021	1.34	10/29/17 0:04	MJL	106-93-4	
1,2-Dichlorobenzene	ND	mg/m3	0.0016	1.34	10/29/17 0:04	MJL	95-50-1	
1,2-Dichloroethane	ND	mg/m3	0.00055	1.34	10/29/17 0:04	MJL	107-06-2	
1,2-Dichloropropane	ND	mg/m3	0.0013	1.34	10/29/17 0:04	MJL	78-87-5	
1,3,5-Trimethylbenzene	0.011	mg/m3	0.0013	1.34	10/29/17 0:04	MJL	108-67-8	
1,3-Butadiene	ND	mg/m3	0.0006	1.34	10/29/17 0:04	MJL	106-99-0	
1,3-Dichlorobenzene	ND	mg/m3	0.0016	1.34	10/29/17 0:04	MJL	541-73-1	
1,4-Dichlorobenzene	ND	mg/m3	0.0016	1.34	10/29/17 0:04	MJL	106-46-7	
2-Butanone (MEK)	ND	mg/m3	0.004	1.34	10/29/17 0:04	MJL	78-93-3	
2-Hexanone	ND	mg/m3	0.0056	1.34	10/29/17 0:04	MJL	591-78-6	
2-Propanol	ND	mg/m3	0.0034	1.34	10/29/17 0:04	MJL	67-63-0	
4-Ethyltoluene	0.0017	mg/m3	0.0013	1.34	10/29/17 0:04	MJL	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	mg/m3	0.0056	1.34	10/29/17 0:04	MJL	108-10-1	
Acetone	0.024	mg/m3	0.0032	1.34	10/29/17 0:04	MJL	67-64-1	
Benzene	7.7	mg/m3	0.029	89.78	10/29/17 19:42	MJL	71-43-2	
Benzyl chloride	ND	mg/m3	0.0014	1.34	10/29/17 0:04	MJL	100-44-7	
Bromodichloromethane	ND	mg/m3	0.0018	1.34	10/29/17 0:04	MJL	75-27-4	
Bromoform	ND	mg/m3	0.0028	1.34	10/29/17 0:04	MJL	75-25-2	
Bromomethane	ND	mg/m3	0.0011	1.34	10/29/17 0:04	MJL	74-83-9	
Carbon disulfide	0.0024	mg/m3	0.00084	1.34	10/29/17 0:04	MJL	75-15-0	
Carbon tetrachloride	ND	mg/m3	0.00086	1.34	10/29/17 0:04	MJL	56-23-5	
Chlorobenzene	ND	mg/m3	0.0013	1.34	10/29/17 0:04	MJL	108-90-7	
Chloroethane	ND	mg/m3	0.00072	1.34	10/29/17 0:04	MJL	75-00-3	
Chloroform	ND	mg/m3	0.00066	1.34	10/29/17 0:04	MJL	67-66-3	
Chloromethane	ND	mg/m3	0.00056	1.34	10/29/17 0:04	MJL	74-87-3	
cis-1,2-Dichloroethene	ND	mg/m3	0.0011	1.34	10/29/17 0:04	MJL	156-59-2	
cis-1,3-Dichloropropene	ND	mg/m3	0.0012	1.34	10/29/17 0:04	MJL	10061-01-5	
Cyclohexane	0.0027	mg/m3	0.00094	1.34	10/29/17 0:04	MJL	110-82-7	
Dibromochloromethane	ND	mg/m3	0.0023	1.34	10/29/17 0:04	MJL	124-48-1	
Dichlorodifluoromethane	0.0021	mg/m3	0.0014	1.34	10/29/17 0:04	MJL	75-71-8	

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984003
Client Sample ID: Cell 3

ProjSampleNum: 10407984003
Matrix: Air

Date Collected: 10/18/17 9:55
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
Dichlorotetrafluoroethane	ND	mg/m3	0.0019	1.34	10/29/17 0:04	MJL	76-14-2	
Ethanol	0.0077	mg/m3	0.0013	1.34	10/29/17 0:04	MJL	64-17-5	
Ethyl acetate	ND	mg/m3	0.00098	1.34	10/29/17 0:04	MJL	141-78-6	
Ethylbenzene	0.01	mg/m3	0.0012	1.34	10/29/17 0:04	MJL	100-41-4	
Hexachloro-1,3-butadiene	ND	mg/m3	0.0029	1.34	10/29/17 0:04	MJL	87-68-3	
m&p-Xylene	0.1	mg/m3	0.0024	1.34	10/29/17 0:04	MJL	179601-23-1	
Methylene Chloride	0.018	mg/m3	0.0047	1.34	10/29/17 0:04	MJL	75-09-2	
Methyl-tert-butyl ether	ND	mg/m3	0.0049	1.34	10/29/17 0:04	MJL	1634-04-4	
Naphthalene	0.012	mg/m3	0.0036	1.34	10/29/17 0:04	MJL	91-20-3	
n-Heptane	0.0012	mg/m3	0.0011	1.34	10/29/17 0:04	MJL	142-82-5	
n-Hexane	0.0042	mg/m3	0.00096	1.34	10/29/17 0:04	MJL	110-54-3	
o-Xylene	0.083	mg/m3	0.0012	1.34	10/29/17 0:04	MJL	95-47-6	
Propylene	ND	mg/m3	0.00047	1.34	10/29/17 0:04	MJL	115-07-1	
Styrene	ND	mg/m3	0.0012	1.34	10/29/17 0:04	MJL	100-42-5	
Tetrachloroethene	ND	mg/m3	0.00092	1.34	10/29/17 0:04	MJL	127-18-4	
Tetrahydrofuran	ND	mg/m3	0.0008	1.34	10/29/17 0:04	MJL	109-99-9	
Toluene	1.1	mg/m3	0.069	89.78	10/29/17 19:42	MJL	108-88-3	
trans-1,2-Dichloroethene	ND	mg/m3	0.0011	1.34	10/29/17 0:04	MJL	156-60-5	
trans-1,3-Dichloropropene	ND	mg/m3	0.0012	1.34	10/29/17 0:04	MJL	10061-02-6	
Trichloroethene	ND	mg/m3	0.00074	1.34	10/29/17 0:04	MJL	79-01-6	
Trichlorofluoromethane	ND	mg/m3	0.0015	1.34	10/29/17 0:04	MJL	75-69-4	
Vinyl acetate	ND	mg/m3	0.00096	1.34	10/29/17 0:04	MJL	108-05-4	
Vinyl chloride	ND	mg/m3	0.00035	1.34	10/29/17 0:04	MJL	75-01-4	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984004
Client Sample ID: Cell 1

ProjSampleNum: 10407984004
Matrix: Air

Date Collected: 10/18/17 10:15
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
Air							
TO-15							
1,1,1-Trichloroethane	0.022	mg/m3	0.0014	1.26	10/29/17 0:40 MJL	71-55-6	
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.00088	1.26	10/29/17 0:40 MJL	79-34-5	
1,1,2-Trichloroethane	ND	mg/m3	0.00069	1.26	10/29/17 0:40 MJL	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	mg/m3	0.002	1.26	10/29/17 0:40 MJL	76-13-1	
1,1-Dichloroethane	ND	mg/m3	0.001	1.26	10/29/17 0:40 MJL	75-34-3	
1,1-Dichloroethene	ND	mg/m3	0.001	1.26	10/29/17 0:40 MJL	75-35-4	
1,2,4-Trichlorobenzene	ND	mg/m3	0.0048	1.26	10/29/17 0:40 MJL	120-82-1	
1,2,4-Trimethylbenzene	0.0043	mg/m3	0.0013	1.26	10/29/17 0:40 MJL	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/m3	0.002	1.26	10/29/17 0:40 MJL	106-93-4	
1,2-Dichlorobenzene	ND	mg/m3	0.0015	1.26	10/29/17 0:40 MJL	95-50-1	
1,2-Dichloroethane	ND	mg/m3	0.00052	1.26	10/29/17 0:40 MJL	107-06-2	
1,2-Dichloropropane	ND	mg/m3	0.0012	1.26	10/29/17 0:40 MJL	78-87-5	
1,3,5-Trimethylbenzene	0.023	mg/m3	0.0013	1.26	10/29/17 0:40 MJL	108-67-8	
1,3-Butadiene	ND	mg/m3	0.00057	1.26	10/29/17 0:40 MJL	106-99-0	
1,3-Dichlorobenzene	ND	mg/m3	0.0015	1.26	10/29/17 0:40 MJL	541-73-1	
1,4-Dichlorobenzene	ND	mg/m3	0.0015	1.26	10/29/17 0:40 MJL	106-46-7	
2-Butanone (MEK)	ND	mg/m3	0.0038	1.26	10/29/17 0:40 MJL	78-93-3	
2-Hexanone	ND	mg/m3	0.0052	1.26	10/29/17 0:40 MJL	591-78-6	
2-Propanol	ND	mg/m3	0.0032	1.26	10/29/17 0:40 MJL	67-63-0	
4-Ethyltoluene	0.0025	mg/m3	0.0013	1.26	10/29/17 0:40 MJL	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	mg/m3	0.0052	1.26	10/29/17 0:40 MJL	108-10-1	
Acetone	0.026	mg/m3	0.003	1.26	10/29/17 0:40 MJL	67-64-1	
Benzene	1.2	mg/m3	0.02	63	10/29/17 18:02 MJL	71-43-2	
Benzyl chloride	ND	mg/m3	0.0013	1.26	10/29/17 0:40 MJL	100-44-7	
Bromodichloromethane	ND	mg/m3	0.0017	1.26	10/29/17 0:40 MJL	75-27-4	
Bromoform	ND	mg/m3	0.0026	1.26	10/29/17 0:40 MJL	75-25-2	
Bromomethane	ND	mg/m3	0.001	1.26	10/29/17 0:40 MJL	74-83-9	
Carbon disulfide	0.0017	mg/m3	0.00079	1.26	10/29/17 0:40 MJL	75-15-0	
Carbon tetrachloride	ND	mg/m3	0.00081	1.26	10/29/17 0:40 MJL	56-23-5	
Chlorobenzene	ND	mg/m3	0.0012	1.26	10/29/17 0:40 MJL	108-90-7	
Chloroethane	ND	mg/m3	0.00068	1.26	10/29/17 0:40 MJL	75-00-3	
Chloroform	ND	mg/m3	0.00062	1.26	10/29/17 0:40 MJL	67-66-3	
Chloromethane	ND	mg/m3	0.00053	1.26	10/29/17 0:40 MJL	74-87-3	
cis-1,2-Dichloroethene	ND	mg/m3	0.001	1.26	10/29/17 0:40 MJL	156-59-2	
cis-1,3-Dichloropropene	ND	mg/m3	0.0012	1.26	10/29/17 0:40 MJL	10061-01-5	
Cyclohexane	0.02	mg/m3	0.00088	1.26	10/29/17 0:40 MJL	110-82-7	
Dibromochloromethane	ND	mg/m3	0.0022	1.26	10/29/17 0:40 MJL	124-48-1	
Dichlorodifluoromethane	0.002	mg/m3	0.0013	1.26	10/29/17 0:40 MJL	75-71-8	

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984004
Client Sample ID: Cell 1

ProjSampleNum: 10407984004
Matrix: Air

Date Collected: 10/18/17 10:15
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
Dichlorotetrafluoroethane	ND	mg/m3	0.0018	1.26	10/29/17 0:40	MJL	76-14-2	
Ethanol	0.0031	mg/m3	0.0012	1.26	10/29/17 0:40	MJL	64-17-5	
Ethyl acetate	ND	mg/m3	0.00092	1.26	10/29/17 0:40	MJL	141-78-6	
Ethylbenzene	0.0083	mg/m3	0.0011	1.26	10/29/17 0:40	MJL	100-41-4	
Hexachloro-1,3-butadiene	ND	mg/m3	0.0027	1.26	10/29/17 0:40	MJL	87-68-3	
m&p-Xylene	0.096	mg/m3	0.0022	1.26	10/29/17 0:40	MJL	179601-23-1	
Methylene Chloride	ND	mg/m3	0.0044	1.26	10/29/17 0:40	MJL	75-09-2	
Methyl-tert-butyl ether	ND	mg/m3	0.0046	1.26	10/29/17 0:40	MJL	1634-04-4	
Naphthalene	0.0055	mg/m3	0.0034	1.26	10/29/17 0:40	MJL	91-20-3	
n-Heptane	0.021	mg/m3	0.001	1.26	10/29/17 0:40	MJL	142-82-5	
n-Hexane	0.0043	mg/m3	0.00091	1.26	10/29/17 0:40	MJL	110-54-3	
o-Xylene	0.036	mg/m3	0.0011	1.26	10/29/17 0:40	MJL	95-47-6	
Propylene	ND	mg/m3	0.00044	1.26	10/29/17 0:40	MJL	115-07-1	
Styrene	ND	mg/m3	0.0011	1.26	10/29/17 0:40	MJL	100-42-5	
Tetrachloroethene	ND	mg/m3	0.00087	1.26	10/29/17 0:40	MJL	127-18-4	
Tetrahydrofuran	ND	mg/m3	0.00076	1.26	10/29/17 0:40	MJL	109-99-9	
Toluene	0.054	mg/m3	0.00097	1.26	10/29/17 0:40	MJL	108-88-3	
trans-1,2-Dichloroethene	ND	mg/m3	0.001	1.26	10/29/17 0:40	MJL	156-60-5	
trans-1,3-Dichloropropene	ND	mg/m3	0.0012	1.26	10/29/17 0:40	MJL	10061-02-6	
Trichloroethene	ND	mg/m3	0.00069	1.26	10/29/17 0:40	MJL	79-01-6	
Trichlorofluoromethane	0.0039	mg/m3	0.0014	1.26	10/29/17 0:40	MJL	75-69-4	
Vinyl acetate	0.0021	mg/m3	0.0009	1.26	10/29/17 0:40	MJL	108-05-4	
Vinyl chloride	ND	mg/m3	0.00033	1.26	10/29/17 0:40	MJL	75-01-4	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984005
Client Sample ID: Cell 6 Oxidizer

ProjSampleNum: 10407984005
Matrix: Air

Date Collected: 10/18/17 10:50
Date Received: 10/20/17 9:50

Air

TO-15

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
1,1,1-Trichloroethane	ND	mg/m3	0.0014	1.26	10/29/17 1:52 MJL	71-55-6	
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.00088	1.26	10/29/17 1:52 MJL	79-34-5	
1,1,2-Trichloroethane	ND	mg/m3	0.00069	1.26	10/29/17 1:52 MJL	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	mg/m3	0.002	1.26	10/29/17 1:52 MJL	76-13-1	
1,1-Dichloroethane	ND	mg/m3	0.001	1.26	10/29/17 1:52 MJL	75-34-3	
1,1-Dichloroethene	ND	mg/m3	0.001	1.26	10/29/17 1:52 MJL	75-35-4	
1,2,4-Trichlorobenzene	ND	mg/m3	0.0048	1.26	10/29/17 1:52 MJL	120-82-1	
1,2,4-Trimethylbenzene	0.0026	mg/m3	0.0013	1.26	10/29/17 1:52 MJL	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/m3	0.002	1.26	10/29/17 1:52 MJL	106-93-4	
1,2-Dichlorobenzene	ND	mg/m3	0.0015	1.26	10/29/17 1:52 MJL	95-50-1	
1,2-Dichloroethane	ND	mg/m3	0.00052	1.26	10/29/17 1:52 MJL	107-06-2	
1,2-Dichloropropane	ND	mg/m3	0.0012	1.26	10/29/17 1:52 MJL	78-87-5	
1,3,5-Trimethylbenzene	ND	mg/m3	0.0013	1.26	10/29/17 1:52 MJL	108-67-8	
1,3-Butadiene	ND	mg/m3	0.00057	1.26	10/29/17 1:52 MJL	106-99-0	
1,3-Dichlorobenzene	ND	mg/m3	0.0015	1.26	10/29/17 1:52 MJL	541-73-1	
1,4-Dichlorobenzene	ND	mg/m3	0.0015	1.26	10/29/17 1:52 MJL	106-46-7	
2-Butanone (MEK)	0.0048	mg/m3	0.0038	1.26	10/29/17 1:52 MJL	78-93-3	
2-Hexanone	ND	mg/m3	0.0052	1.26	10/29/17 1:52 MJL	591-78-6	
2-Propanol	0.0059	mg/m3	0.0032	1.26	10/29/17 1:52 MJL	67-63-0	
4-Ethyltoluene	ND	mg/m3	0.0013	1.26	10/29/17 1:52 MJL	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	mg/m3	0.0052	1.26	10/29/17 1:52 MJL	108-10-1	
Acetone	0.011	mg/m3	0.003	1.26	10/29/17 1:52 MJL	67-64-1	
Benzene	0.077	mg/m3	0.00041	1.26	10/29/17 1:52 MJL	71-43-2	
Benzyl chloride	ND	mg/m3	0.0013	1.26	10/29/17 1:52 MJL	100-44-7	
Bromodichloromethane	ND	mg/m3	0.0017	1.26	10/29/17 1:52 MJL	75-27-4	
Bromoform	ND	mg/m3	0.0026	1.26	10/29/17 1:52 MJL	75-25-2	
Bromomethane	ND	mg/m3	0.001	1.26	10/29/17 1:52 MJL	74-83-9	
Carbon disulfide	ND	mg/m3	0.00079	1.26	10/29/17 1:52 MJL	75-15-0	
Carbon tetrachloride	ND	mg/m3	0.00081	1.26	10/29/17 1:52 MJL	56-23-5	
Chlorobenzene	ND	mg/m3	0.0012	1.26	10/29/17 1:52 MJL	108-90-7	
Chloroethane	ND	mg/m3	0.00068	1.26	10/29/17 1:52 MJL	75-00-3	
Chloroform	ND	mg/m3	0.00062	1.26	10/29/17 1:52 MJL	67-66-3	
Chloromethane	0.001	mg/m3	0.00053	1.26	10/29/17 1:52 MJL	74-87-3	
cis-1,2-Dichloroethene	ND	mg/m3	0.001	1.26	10/29/17 1:52 MJL	156-59-2	
cis-1,3-Dichloropropene	ND	mg/m3	0.0012	1.26	10/29/17 1:52 MJL	10061-01-5	
Cyclohexane	0.0035	mg/m3	0.00088	1.26	10/29/17 1:52 MJL	110-82-7	
Dibromochloromethane	ND	mg/m3	0.0022	1.26	10/29/17 1:52 MJL	124-48-1	
Dichlorodifluoromethane	ND	mg/m3	0.0013	1.26	10/29/17 1:52 MJL	75-71-8	

SUPPLEMENTAL REPORT

Units Conversion Request

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984005
Client Sample ID: Cell 6 Oxidizer

ProjSampleNum: 10407984005
Matrix: Air

Date Collected: 10/18/17 10:50
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
Dichlorotetrafluoroethane	ND	mg/m3	0.0018	1.26	10/29/17 1:52	MJL	76-14-2	
Ethanol	0.0044	mg/m3	0.0012	1.26	10/29/17 1:52	MJL	64-17-5	
Ethyl acetate	ND	mg/m3	0.00092	1.26	10/29/17 1:52	MJL	141-78-6	
Ethylbenzene	ND	mg/m3	0.0011	1.26	10/29/17 1:52	MJL	100-41-4	
Hexachloro-1,3-butadiene	ND	mg/m3	0.0027	1.26	10/29/17 1:52	MJL	87-68-3	
m&p-Xylene	0.0023	mg/m3	0.0022	1.26	10/29/17 1:52	MJL	179601-23-1	
Methylene Chloride	ND	mg/m3	0.0044	1.26	10/29/17 1:52	MJL	75-09-2	
Methyl-tert-butyl ether	ND	mg/m3	0.0046	1.26	10/29/17 1:52	MJL	1634-04-4	
Naphthalene	0.01	mg/m3	0.0034	1.26	10/29/17 1:52	MJL	91-20-3	
n-Heptane	0.0048	mg/m3	0.001	1.26	10/29/17 1:52	MJL	142-82-5	
n-Hexane	0.0089	mg/m3	0.00091	1.26	10/29/17 1:52	MJL	110-54-3	
o-Xylene	ND	mg/m3	0.0011	1.26	10/29/17 1:52	MJL	95-47-6	
Propylene	ND	mg/m3	0.00044	1.26	10/29/17 1:52	MJL	115-07-1	
Styrene	ND	mg/m3	0.0011	1.26	10/29/17 1:52	MJL	100-42-5	
Tetrachloroethene	ND	mg/m3	0.00087	1.26	10/29/17 1:52	MJL	127-18-4	
Tetrahydrofuran	ND	mg/m3	0.00076	1.26	10/29/17 1:52	MJL	109-99-9	
Toluene	0.012	mg/m3	0.00097	1.26	10/29/17 1:52	MJL	108-88-3	
trans-1,2-Dichloroethene	ND	mg/m3	0.001	1.26	10/29/17 1:52	MJL	156-60-5	
trans-1,3-Dichloropropene	ND	mg/m3	0.0012	1.26	10/29/17 1:52	MJL	10061-02-6	
Trichloroethene	ND	mg/m3	0.00069	1.26	10/29/17 1:52	MJL	79-01-6	
Trichlorofluoromethane	ND	mg/m3	0.0014	1.26	10/29/17 1:52	MJL	75-69-4	
Vinyl acetate	0.0023	mg/m3	0.0009	1.26	10/29/17 1:52	MJL	108-05-4	
Vinyl chloride	ND	mg/m3	0.00033	1.26	10/29/17 1:52	MJL	75-01-4	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984006
Client Sample ID: Cell 6 Blower

ProjSampleNum: 10407984006
Matrix: Air

Date Collected: 10/18/17 10:45
Date Received: 10/20/17 9:50

Air

TO-15

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
1,1,1-Trichloroethane	ND	mg/m3	0.0013	1.18	10/29/17 2:28 MJL	71-55-6	
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.00082	1.18	10/29/17 2:28 MJL	79-34-5	
1,1,2-Trichloroethane	ND	mg/m3	0.00065	1.18	10/29/17 2:28 MJL	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	mg/m3	0.0019	1.18	10/29/17 2:28 MJL	76-13-1	
1,1-Dichloroethane	ND	mg/m3	0.00097	1.18	10/29/17 2:28 MJL	75-34-3	
1,1-Dichloroethene	ND	mg/m3	0.00096	1.18	10/29/17 2:28 MJL	75-35-4	
1,2,4-Trichlorobenzene	ND	mg/m3	0.0044	1.18	10/29/17 2:28 MJL	120-82-1	
1,2,4-Trimethylbenzene	17.8	mg/m3	6	6041.6	10/29/17 20:17 MJL	95-63-6	A3
1,2-Dibromoethane (EDB)	ND	mg/m3	0.0018	1.18	10/29/17 2:28 MJL	106-93-4	
1,2-Dichlorobenzene	ND	mg/m3	0.0014	1.18	10/29/17 2:28 MJL	95-50-1	
1,2-Dichloroethane	ND	mg/m3	0.00048	1.18	10/29/17 2:28 MJL	107-06-2	
1,2-Dichloropropane	ND	mg/m3	0.0011	1.18	10/29/17 2:28 MJL	78-87-5	
1,3,5-Trimethylbenzene	12.4	mg/m3	6	6041.6	10/29/17 20:17 MJL	108-67-8	A3
1,3-Butadiene	ND	mg/m3	0.00053	1.18	10/29/17 2:28 MJL	106-99-0	
1,3-Dichlorobenzene	ND	mg/m3	0.0014	1.18	10/29/17 2:28 MJL	541-73-1	
1,4-Dichlorobenzene	ND	mg/m3	0.0014	1.18	10/29/17 2:28 MJL	106-46-7	
2-Butanone (MEK)	ND	mg/m3	0.0035	1.18	10/29/17 2:28 MJL	78-93-3	
2-Hexanone	ND	mg/m3	0.0049	1.18	10/29/17 2:28 MJL	591-78-6	
2-Propanol	ND	mg/m3	0.003	1.18	10/29/17 2:28 MJL	67-63-0	
4-Ethyltoluene	0.064	mg/m3	0.0012	1.18	10/29/17 2:28 MJL	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	mg/m3	0.0049	1.18	10/29/17 2:28 MJL	108-10-1	
Acetone	ND	mg/m3	0.0028	1.18	10/29/17 2:28 MJL	67-64-1	
Benzene	1360	mg/m3	2	6041.6	10/29/17 20:17 MJL	71-43-2	A3, E
Benzyl chloride	ND	mg/m3	0.0012	1.18	10/29/17 2:28 MJL	100-44-7	
Bromodichloromethane	ND	mg/m3	0.0016	1.18	10/29/17 2:28 MJL	75-27-4	
Bromoform	ND	mg/m3	0.0025	1.18	10/29/17 2:28 MJL	75-25-2	
Bromomethane	ND	mg/m3	0.00093	1.18	10/29/17 2:28 MJL	74-83-9	
Carbon disulfide	0.08	mg/m3	0.00074	1.18	10/29/17 2:28 MJL	75-15-0	
Carbon tetrachloride	ND	mg/m3	0.00076	1.18	10/29/17 2:28 MJL	56-23-5	
Chlorobenzene	0.021	mg/m3	0.0011	1.18	10/29/17 2:28 MJL	108-90-7	
Chloroethane	ND	mg/m3	0.00064	1.18	10/29/17 2:28 MJL	75-00-3	
Chloroform	ND	mg/m3	0.00059	1.18	10/29/17 2:28 MJL	67-66-3	
Chloromethane	0.0012	mg/m3	0.0005	1.18	10/29/17 2:28 MJL	74-87-3	
cis-1,2-Dichloroethene	ND	mg/m3	0.00096	1.18	10/29/17 2:28 MJL	156-59-2	
cis-1,3-Dichloropropene	ND	mg/m3	0.0011	1.18	10/29/17 2:28 MJL	10061-01-5	
Cyclohexane	ND	mg/m3	0.00083	1.18	10/29/17 2:28 MJL	110-82-7	
Dibromochloromethane	ND	mg/m3	0.002	1.18	10/29/17 2:28 MJL	124-48-1	
Dichlorodifluoromethane	0.0022	mg/m3	0.0012	1.18	10/29/17 2:28 MJL	75-71-8	

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984006
Client Sample ID: Cell 6 Blower

ProjSampleNum: 10407984006
Matrix: Air

Date Collected: 10/18/17 10:45
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
Dichlorotetrafluoroethane	ND	mg/m3	0.0017	1.18	10/29/17 2:28	MJL	76-14-2	
Ethanol	0.0097	mg/m3	0.0011	1.18	10/29/17 2:28	MJL	64-17-5	
Ethyl acetate	ND	mg/m3	0.00086	1.18	10/29/17 2:28	MJL	141-78-6	
Ethylbenzene	39.1	mg/m3	5.3	6041.6	10/29/17 20:17	MJL	100-41-4	A3
Hexachloro-1,3-butadiene	ND	mg/m3	0.0026	1.18	10/29/17 2:28	MJL	87-68-3	
m&p-Xylene	192	mg/m3	10.7	6041.6	10/29/17 20:17	MJL	179601-23-1	A3
Methylene Chloride	ND	mg/m3	0.0042	1.18	10/29/17 2:28	MJL	75-09-2	
Methyl-tert-butyl ether	ND	mg/m3	0.0043	1.18	10/29/17 2:28	MJL	1634-04-4	
Naphthalene	0.042	mg/m3	0.0031	1.18	10/29/17 2:28	MJL	91-20-3	
n-Heptane	0.79	mg/m3	0.00098	1.18	10/29/17 2:28	MJL	142-82-5	E
n-Hexane	0.97	mg/m3	0.00085	1.18	10/29/17 2:28	MJL	110-54-3	E
o-Xylene	52.5	mg/m3	5.3	6041.6	10/29/17 20:17	MJL	95-47-6	A3
Propylene	0.014	mg/m3	0.00041	1.18	10/29/17 2:28	MJL	115-07-1	
Styrene	32.4	mg/m3	5.3	6041.6	10/29/17 20:17	MJL	100-42-5	A3
Tetrachloroethene	0.0013	mg/m3	0.00081	1.18	10/29/17 2:28	MJL	127-18-4	
Tetrahydrofuran	ND	mg/m3	0.00071	1.18	10/29/17 2:28	MJL	109-99-9	
Toluene	866	mg/m3	4.6	6041.6	10/29/17 20:17	MJL	108-88-3	A3, E
trans-1,2-Dichloroethene	ND	mg/m3	0.00096	1.18	10/29/17 2:28	MJL	156-60-5	
trans-1,3-Dichloropropene	ND	mg/m3	0.0011	1.18	10/29/17 2:28	MJL	10061-02-6	
Trichloroethene	ND	mg/m3	0.00065	1.18	10/29/17 2:28	MJL	79-01-6	
Trichlorofluoromethane	0.0017	mg/m3	0.0013	1.18	10/29/17 2:28	MJL	75-69-4	
Vinyl acetate	ND	mg/m3	0.00084	1.18	10/29/17 2:28	MJL	108-05-4	
Vinyl chloride	ND	mg/m3	0.00031	1.18	10/29/17 2:28	MJL	75-01-4	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984007
Client Sample ID: Cell 2 SVE

ProjSampleNum: 10407984007
Matrix: Air

Date Collected: 10/18/17 11:20
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed	CAS No.	Qualifiers
Air							
TO-15							
1,1,1-Trichloroethane	ND	mg/m3	0.0015	1.34	10/29/17 1:16 MJL	71-55-6	
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.00094	1.34	10/29/17 1:16 MJL	79-34-5	
1,1,2-Trichloroethane	ND	mg/m3	0.00074	1.34	10/29/17 1:16 MJL	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	mg/m3	0.0021	1.34	10/29/17 1:16 MJL	76-13-1	
1,1-Dichloroethane	ND	mg/m3	0.0011	1.34	10/29/17 1:16 MJL	75-34-3	
1,1-Dichloroethene	ND	mg/m3	0.0011	1.34	10/29/17 1:16 MJL	75-35-4	
1,2,4-Trichlorobenzene	ND	mg/m3	0.0051	1.34	10/29/17 1:16 MJL	120-82-1	
1,2,4-Trimethylbenzene	0.0025	mg/m3	0.0013	1.34	10/29/17 1:16 MJL	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/m3	0.0021	1.34	10/29/17 1:16 MJL	106-93-4	
1,2-Dichlorobenzene	ND	mg/m3	0.0016	1.34	10/29/17 1:16 MJL	95-50-1	
1,2-Dichloroethane	ND	mg/m3	0.00055	1.34	10/29/17 1:16 MJL	107-06-2	
1,2-Dichloropropane	ND	mg/m3	0.0013	1.34	10/29/17 1:16 MJL	78-87-5	
1,3,5-Trimethylbenzene	ND	mg/m3	0.0013	1.34	10/29/17 1:16 MJL	108-67-8	
1,3-Butadiene	ND	mg/m3	0.0006	1.34	10/29/17 1:16 MJL	106-99-0	
1,3-Dichlorobenzene	ND	mg/m3	0.0016	1.34	10/29/17 1:16 MJL	541-73-1	
1,4-Dichlorobenzene	ND	mg/m3	0.0016	1.34	10/29/17 1:16 MJL	106-46-7	
2-Butanone (MEK)	ND	mg/m3	0.004	1.34	10/29/17 1:16 MJL	78-93-3	
2-Hexanone	ND	mg/m3	0.0056	1.34	10/29/17 1:16 MJL	591-78-6	
2-Propanol	ND	mg/m3	0.0034	1.34	10/29/17 1:16 MJL	67-63-0	
4-Ethyltoluene	ND	mg/m3	0.0013	1.34	10/29/17 1:16 MJL	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	mg/m3	0.0056	1.34	10/29/17 1:16 MJL	108-10-1	
Acetone	0.024	mg/m3	0.0032	1.34	10/29/17 1:16 MJL	67-64-1	
Benzene	0.01	mg/m3	0.00044	1.34	10/29/17 1:16 MJL	71-43-2	
Benzyl chloride	ND	mg/m3	0.0014	1.34	10/29/17 1:16 MJL	100-44-7	
Bromodichloromethane	ND	mg/m3	0.0018	1.34	10/29/17 1:16 MJL	75-27-4	
Bromoform	ND	mg/m3	0.0028	1.34	10/29/17 1:16 MJL	75-25-2	
Bromomethane	ND	mg/m3	0.0011	1.34	10/29/17 1:16 MJL	74-83-9	
Carbon disulfide	ND	mg/m3	0.00084	1.34	10/29/17 1:16 MJL	75-15-0	
Carbon tetrachloride	ND	mg/m3	0.00086	1.34	10/29/17 1:16 MJL	56-23-5	
Chlorobenzene	ND	mg/m3	0.0013	1.34	10/29/17 1:16 MJL	108-90-7	
Chloroethane	ND	mg/m3	0.00072	1.34	10/29/17 1:16 MJL	75-00-3	
Chloroform	ND	mg/m3	0.00066	1.34	10/29/17 1:16 MJL	67-66-3	
Chloromethane	0.00071	mg/m3	0.00056	1.34	10/29/17 1:16 MJL	74-87-3	
cis-1,2-Dichloroethene	ND	mg/m3	0.0011	1.34	10/29/17 1:16 MJL	156-59-2	
cis-1,3-Dichloropropene	ND	mg/m3	0.0012	1.34	10/29/17 1:16 MJL	10061-01-5	
Cyclohexane	ND	mg/m3	0.00094	1.34	10/29/17 1:16 MJL	110-82-7	
Dibromochloromethane	ND	mg/m3	0.0023	1.34	10/29/17 1:16 MJL	124-48-1	
Dichlorodifluoromethane	ND	mg/m3	0.0014	1.34	10/29/17 1:16 MJL	75-71-8	

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984007
Client Sample ID: Cell 2 SVE

ProjSampleNum: 10407984007
Matrix: Air

Date Collected: 10/18/17 11:20
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
Dichlorotetrafluoroethane	ND	mg/m3	0.0019	1.34	10/29/17 1:16	MJL	76-14-2	
Ethanol	0.0071	mg/m3	0.0013	1.34	10/29/17 1:16	MJL	64-17-5	
Ethyl acetate	ND	mg/m3	0.00098	1.34	10/29/17 1:16	MJL	141-78-6	
Ethylbenzene	ND	mg/m3	0.0012	1.34	10/29/17 1:16	MJL	100-41-4	
Hexachloro-1,3-butadiene	ND	mg/m3	0.0029	1.34	10/29/17 1:16	MJL	87-68-3	
m&p-Xylene	0.0039	mg/m3	0.0024	1.34	10/29/17 1:16	MJL	179601-23-1	
Methylene Chloride	ND	mg/m3	0.0047	1.34	10/29/17 1:16	MJL	75-09-2	
Methyl-tert-butyl ether	ND	mg/m3	0.0049	1.34	10/29/17 1:16	MJL	1634-04-4	
Naphthalene	0.0052	mg/m3	0.0036	1.34	10/29/17 1:16	MJL	91-20-3	
n-Heptane	ND	mg/m3	0.0011	1.34	10/29/17 1:16	MJL	142-82-5	
n-Hexane	ND	mg/m3	0.00096	1.34	10/29/17 1:16	MJL	110-54-3	
o-Xylene	0.0014	mg/m3	0.0012	1.34	10/29/17 1:16	MJL	95-47-6	
Propylene	ND	mg/m3	0.00047	1.34	10/29/17 1:16	MJL	115-07-1	
Styrene	ND	mg/m3	0.0012	1.34	10/29/17 1:16	MJL	100-42-5	
Tetrachloroethene	ND	mg/m3	0.00092	1.34	10/29/17 1:16	MJL	127-18-4	
Tetrahydrofuran	ND	mg/m3	0.0008	1.34	10/29/17 1:16	MJL	109-99-9	
Toluene	0.0046	mg/m3	0.001	1.34	10/29/17 1:16	MJL	108-88-3	
trans-1,2-Dichloroethene	ND	mg/m3	0.0011	1.34	10/29/17 1:16	MJL	156-60-5	
trans-1,3-Dichloropropene	ND	mg/m3	0.0012	1.34	10/29/17 1:16	MJL	10061-02-6	
Trichloroethene	ND	mg/m3	0.00074	1.34	10/29/17 1:16	MJL	79-01-6	
Trichlorofluoromethane	ND	mg/m3	0.0015	1.34	10/29/17 1:16	MJL	75-69-4	
Vinyl acetate	0.0013	mg/m3	0.00096	1.34	10/29/17 1:16	MJL	108-05-4	
Vinyl chloride	ND	mg/m3	0.00035	1.34	10/29/17 1:16	MJL	75-01-4	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

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Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984008
Client Sample ID: Cell 2 AS Off Gas

ProjSampleNum: 10407984008
Matrix: Air

Date Collected: 10/18/17 11:25
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
TO-15								
1,1,1-Trichloroethane	ND	mg/m3	0.05	45.25	10/31/17 17:39	MJL	71-55-6	
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.032	45.25	10/31/17 17:39	MJL	79-34-5	
1,1,2-Trichloroethane	ND	mg/m3	0.025	45.25	10/31/17 17:39	MJL	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	mg/m3	0.072	45.25	10/31/17 17:39	MJL	76-13-1	
1,1-Dichloroethane	ND	mg/m3	0.037	45.25	10/31/17 17:39	MJL	75-34-3	
1,1-Dichloroethene	ND	mg/m3	0.037	45.25	10/31/17 17:39	MJL	75-35-4	
1,2,4-Trichlorobenzene	ND	mg/m3	0.17	45.25	10/31/17 17:39	MJL	120-82-1	
1,2,4-Trimethylbenzene	1.4	mg/m3	0.045	45.25	10/31/17 17:39	MJL	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/m3	0.071	45.25	10/31/17 17:39	MJL	106-93-4	
1,2-Dichlorobenzene	ND	mg/m3	0.055	45.25	10/31/17 17:39	MJL	95-50-1	
1,2-Dichloroethane	ND	mg/m3	0.019	45.25	10/31/17 17:39	MJL	107-06-2	
1,2-Dichloropropane	ND	mg/m3	0.042	45.25	10/31/17 17:39	MJL	78-87-5	
1,3,5-Trimethylbenzene	0.8	mg/m3	0.045	45.25	10/31/17 17:39	MJL	108-67-8	
1,3-Butadiene	ND	mg/m3	0.02	45.25	10/31/17 17:39	MJL	106-99-0	
1,3-Dichlorobenzene	ND	mg/m3	0.055	45.25	10/31/17 17:39	MJL	541-73-1	
1,4-Dichlorobenzene	ND	mg/m3	0.055	45.25	10/31/17 17:39	MJL	106-46-7	
2-Butanone (MEK)	ND	mg/m3	0.14	45.25	10/31/17 17:39	MJL	78-93-3	
2-Hexanone	ND	mg/m3	0.19	45.25	10/31/17 17:39	MJL	591-78-6	
2-Propanol	ND	mg/m3	0.11	45.25	10/31/17 17:39	MJL	67-63-0	
4-Ethyltoluene	0.14	mg/m3	0.045	45.25	10/31/17 17:39	MJL	622-96-8	
4-Methyl-2-pentanone (MIBK)	ND	mg/m3	0.19	45.25	10/31/17 17:39	MJL	108-10-1	
Acetone	ND	mg/m3	0.11	45.25	10/31/17 17:39	MJL	67-64-1	
Benzene	4060	mg/m3	3.8	1583.7	11/01/17 11:39	MJL	71-43-2	A3, E
Benzyl chloride	ND	mg/m3	0.048	45.25	10/31/17 17:39	MJL	100-44-7	
Bromodichloromethane	ND	mg/m3	0.062	45.25	10/31/17 17:39	MJL	75-27-4	
Bromoform	ND	mg/m3	0.095	45.25	10/31/17 17:39	MJL	75-25-2	
Bromomethane	ND	mg/m3	0.036	45.25	10/31/17 17:39	MJL	74-83-9	
Carbon disulfide	0.099	mg/m3	0.028	45.25	10/31/17 17:39	MJL	75-15-0	
Carbon tetrachloride	ND	mg/m3	0.029	45.25	10/31/17 17:39	MJL	56-23-5	
Chlorobenzene	ND	mg/m3	0.042	45.25	10/31/17 17:39	MJL	108-90-7	
Chloroethane	ND	mg/m3	0.024	45.25	10/31/17 17:39	MJL	75-00-3	
Chloroform	ND	mg/m3	0.022	45.25	10/31/17 17:39	MJL	67-66-3	
Chloromethane	ND	mg/m3	0.019	45.25	10/31/17 17:39	MJL	74-87-3	
cis-1,2-Dichloroethene	ND	mg/m3	0.037	45.25	10/31/17 17:39	MJL	156-59-2	
cis-1,3-Dichloropropene	ND	mg/m3	0.042	45.25	10/31/17 17:39	MJL	10061-01-5	
Cyclohexane	ND	mg/m3	0.032	45.25	10/31/17 17:39	MJL	110-82-7	
Dibromochloromethane	ND	mg/m3	0.078	45.25	10/31/17 17:39	MJL	124-48-1	
Dichlorodifluoromethane	ND	mg/m3	0.046	45.25	10/31/17 17:39	MJL	75-71-8	

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ANALYTICAL RESULTS

Client: Enviro Analytics Group
Phone: 410-290-7775 x2004

Lab Project Number: 10407984
Project Name: Sparrows Point

Lab Sample No: 10407984008
Client Sample ID: Cell 2 AS Off Gas

ProjSampleNum: 10407984008
Matrix: Air

Date Collected: 10/18/17 11:25
Date Received: 10/20/17 9:50

Parameters	Results	Units	Report Limit	DF	Analyzed		CAS No.	Qualifiers
Air								
Dichlorotetrafluoroethane	ND	mg/m3	0.064	45.25	10/31/17 17:39	MJL	76-14-2	
Ethanol	ND	mg/m3	0.043	45.25	10/31/17 17:39	MJL	64-17-5	
Ethyl acetate	ND	mg/m3	0.033	45.25	10/31/17 17:39	MJL	141-78-6	
Ethylbenzene	4.8	mg/m3	0.04	45.25	10/31/17 17:39	MJL	100-41-4	
Hexachloro-1,3-butadiene	ND	mg/m3	0.098	45.25	10/31/17 17:39	MJL	87-68-3	
m&p-Xylene	133	mg/m3	20.5	1583.7	11/01/17 11:39	MJL	179601-23-1	A3
Methylene Chloride	ND	mg/m3	0.16	45.25	10/31/17 17:39	MJL	75-09-2	
Methyl-tert-butyl ether	ND	mg/m3	0.17	45.25	10/31/17 17:39	MJL	1634-04-4	
Naphthalene	0.52	mg/m3	0.12	45.25	10/31/17 17:39	MJL	91-20-3	
n-Heptane	ND	mg/m3	0.038	45.25	10/31/17 17:39	MJL	142-82-5	
n-Hexane	ND	mg/m3	0.033	45.25	10/31/17 17:39	MJL	110-54-3	
o-Xylene	45.7	mg/m3	10.2	1583.7	11/01/17 11:39	MJL	95-47-6	A3
Propylene	ND	mg/m3	0.016	45.25	10/31/17 17:39	MJL	115-07-1	
Styrene	ND	mg/m3	0.039	45.25	10/31/17 17:39	MJL	100-42-5	
Tetrachloroethene	ND	mg/m3	0.031	45.25	10/31/17 17:39	MJL	127-18-4	
Tetrahydrofuran	ND	mg/m3	0.027	45.25	10/31/17 17:39	MJL	109-99-9	
Toluene	633	mg/m3	8.9	1583.7	11/01/17 11:39	MJL	108-88-3	A3
trans-1,2-Dichloroethene	ND	mg/m3	0.037	45.25	10/31/17 17:39	MJL	156-60-5	
trans-1,3-Dichloropropene	ND	mg/m3	0.042	45.25	10/31/17 17:39	MJL	10061-02-6	
Trichloroethene	ND	mg/m3	0.025	45.25	10/31/17 17:39	MJL	79-01-6	
Trichlorofluoromethane	ND	mg/m3	0.052	45.25	10/31/17 17:39	MJL	75-69-4	
Vinyl acetate	ND	mg/m3	0.032	45.25	10/31/17 17:39	MJL	108-05-4	
Vinyl chloride	ND	mg/m3	0.012	45.25	10/31/17 17:39	MJL	75-01-4	

DISCLAIMER: These results have been converted to the units shown from the original units of measurement assuming 20 degrees Celsius and 1 atmosphere pressure. Values were not rounded according to EPA rounding rules. THC is quantitated based on the average response factors of several compounds; the nominal molecular weight of THC used for units conversion is the average of the molecular weights of the compounds used for quantitation.

Pace Analytical Services, Inc.
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Phone: 612.607.1700
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ANALYTICAL RESULTS

Client:	Enviro Analytics Group	Lab Project Number:	10407984
Phone:	410-290-7775 x2004	Project Name:	Sparrows Point

PARAMETER FOOTNOTES

ND Not detected at or above adjusted reporting limit

NC Not Calculable

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

[E] Analyte concentration exceeded the calibration range. The reported result is estimated.

[A3] The sample was analyzed by serial dilution.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

December 01, 2017

James Calenda
Environmental Liability Transfer
1430 Sparrows Point Blvd
Sparrows Point, MD 21219

RE: Project: Sparrows Point
Pace Project No.: 10412079

Dear James Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on November 22, 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,

Nathan Boberg
nathan.boberg@pacelabs.com
(612)607-6407
Project Manager

Enclosures

cc: Josh Burke, Enviro Analytics Group

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project:	Sparrows Point
Pace Project No.:	10412079

Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #:MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon NwTPH Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C
West Virginia DEP Certification #: 382
Wisconsin Certification #: 999407970

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: Sparrows Point
Pace Project No.: 10412079

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10412079001	**Cell 3**	Air	11/17/17 14:10	11/22/17 09:45
10412079002	**Cell 1**	Air	11/17/17 13:20	11/22/17 09:45
10412079003	**Cell 5 INF**	Air	11/17/17 10:30	11/22/17 09:45
10412079004	**Cell 6 Blower**	Air	11/17/17 11:15	11/22/17 09:45
10412079005	**Cell 6 Oxidizer**	Air	11/17/17 11:20	11/22/17 09:45
10412079006	**Cell 5 AST**	Air	11/17/17 10:35	11/22/17 09:45
10412079007	**Cell 2 SVE**	Air	11/17/17 15:05	11/22/17 09:45
10412079008	**Cell 2 AST Off Gas**	Air	11/17/17 15:00	11/22/17 09:45

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SAMPLE ANALYTE COUNT

Project: Sparrows Point
Pace Project No.: 10412079

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10412079001	**Cell 3**	TO-15	AFV, EMC	61
10412079002	**Cell 1**	TO-15	EMC	61
10412079003	**Cell 5 INF**	TO-15	EMC	61
10412079004	**Cell 6 Blower**	TO-15	EMC	61
10412079005	**Cell 6 Oxidizer**	TO-15	EMC	61
10412079006	**Cell 5 AST**	TO-15	EMC	61
10412079007	**Cell 2 SVE**	TO-15	EMC	61
10412079008	**Cell 2 AST Off Gas**	TO-15	AFV	61

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PROJECT NARRATIVE

Project: Sparrows Point
Pace Project No.: 10412079

Date: December 01, 2017

Cell 3 (Lab ID: 10412079001)

- A3: This result is reported from a serial dilution.

Cell 6 Blower (Lab ID: 10412079004)

- A3: This result is reported from a serial dilution.

Cell 5 AST (Lab ID: 10412079006)

- A3: This result is reported from a serial dilution.

Cell 2 AST Off Gas (Lab ID: 10412079008)

- A3: This result is reported from a serial dilution.

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PROJECT NARRATIVE

Project: Sparrows Point
Pace Project No.: 10412079

Method: **TO-15**
Description: TO15 MSV AIR
Client: Enviro Analytics Group
Date: December 01, 2017

General Information:
8 samples were analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

QC Batch: 511175

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- LCS (Lab ID: 2779866)
  - Vinyl acetate

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 511175

R1: RPD value was outside control limits.

- DUP (Lab ID: 2780686)
  - Ethanol

Additional Comments:

Analyte Comments:

QC Batch: 511175

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- Cell 6 Blower (Lab ID: 10412079004)
  - Benzene

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 3 **Lab ID: 10412079001** Collected: 11/17/17 14:10 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**68.1**	ug/m3	3.2	1.34		12/01/17 03:10	67-64-1	
Benzene	**63400**	ug/m3	697	2144		12/01/17 12:41	71-43-2	
Benzyl chloride	ND	ug/m3	1.4	1.34		12/01/17 03:10	100-44-7	
Bromodichloromethane	ND	ug/m3	1.8	1.34		12/01/17 03:10	75-27-4	
Bromoform	ND	ug/m3	2.8	1.34		12/01/17 03:10	75-25-2	
Bromomethane	ND	ug/m3	1.1	1.34		12/01/17 03:10	74-83-9	
1,3-Butadiene	ND	ug/m3	0.60	1.34		12/01/17 03:10	106-99-0	
2-Butanone (MEK)	ND	ug/m3	4.0	1.34		12/01/17 03:10	78-93-3	
Carbon disulfide	**8.1**	ug/m3	0.84	1.34		12/01/17 03:10	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.86	1.34		12/01/17 03:10	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	1.34		12/01/17 03:10	108-90-7	
Chloroethane	ND	ug/m3	0.72	1.34		12/01/17 03:10	75-00-3	
Chloroform	ND	ug/m3	0.66	1.34		12/01/17 03:10	67-66-3	
Chloromethane	**3.1**	ug/m3	0.56	1.34		12/01/17 03:10	74-87-3	
Cyclohexane	ND	ug/m3	0.94	1.34		12/01/17 03:10	110-82-7	
Dibromochloromethane	ND	ug/m3	2.3	1.34		12/01/17 03:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.1	1.34		12/01/17 03:10	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.6	1.34		12/01/17 03:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.6	1.34		12/01/17 03:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.6	1.34		12/01/17 03:10	106-46-7	
Dichlorodifluoromethane	**1.8**	ug/m3	1.4	1.34		12/01/17 03:10	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		12/01/17 03:10	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.55	1.34		12/01/17 03:10	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.1	1.34		12/01/17 03:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		12/01/17 03:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		12/01/17 03:10	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	1.34		12/01/17 03:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.2	1.34		12/01/17 03:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.2	1.34		12/01/17 03:10	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.9	1.34		12/01/17 03:10	76-14-2	
Ethanol	**22.1**	ug/m3	1.3	1.34		12/01/17 03:10	64-17-5	
Ethyl acetate	ND	ug/m3	0.98	1.34		12/01/17 03:10	141-78-6	
Ethylbenzene	**41.4**	ug/m3	1.2	1.34		12/01/17 03:10	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.3	1.34		12/01/17 03:10	622-96-8	
n-Heptane	**3.7**	ug/m3	1.1	1.34		12/01/17 03:10	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.9	1.34		12/01/17 03:10	87-68-3	
n-Hexane	**6.8**	ug/m3	0.96	1.34		12/01/17 03:10	110-54-3	
2-Hexanone	ND	ug/m3	5.6	1.34		12/01/17 03:10	591-78-6	
Methylene Chloride	ND	ug/m3	4.7	1.34		12/01/17 03:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.6	1.34		12/01/17 03:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.9	1.34		12/01/17 03:10	1634-04-4	
Naphthalene	**3.8**	ug/m3	3.6	1.34		12/01/17 03:10	91-20-3	
2-Propanol	**3.7**	ug/m3	3.4	1.34		12/01/17 03:10	67-63-0	
Propylene	**12.5**	ug/m3	0.47	1.34		12/01/17 03:10	115-07-1	
Styrene	**14.5**	ug/m3	1.2	1.34		12/01/17 03:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.94	1.34		12/01/17 03:10	79-34-5	
Tetrachloroethene	ND	ug/m3	0.92	1.34		12/01/17 03:10	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 3 **Lab ID: 10412079001** Collected: 11/17/17 14:10 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	0.80	1.34		12/01/17 03:10	109-99-9	
Toluene	**2230**	ug/m3	51.6	67		12/01/17 03:41	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	5.1	1.34		12/01/17 03:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		12/01/17 03:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.74	1.34		12/01/17 03:10	79-00-5	
Trichloroethene	ND	ug/m3	0.74	1.34		12/01/17 03:10	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.5	1.34		12/01/17 03:10	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.1	1.34		12/01/17 03:10	76-13-1	
1,2,4-Trimethylbenzene	**10.3**	ug/m3	1.3	1.34		12/01/17 03:10	95-63-6	
1,3,5-Trimethylbenzene	**22.7**	ug/m3	1.3	1.34		12/01/17 03:10	108-67-8	
Vinyl acetate	ND	ug/m3	2.4	1.34		12/01/17 03:10	108-05-4	
Vinyl chloride	ND	ug/m3	0.35	1.34		12/01/17 03:10	75-01-4	
m&p-Xylene	**312**	ug/m3	2.4	1.34		12/01/17 03:10	179601-23-1	
o-Xylene	**183**	ug/m3	59.0	67		12/01/17 03:41	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 1 **Lab ID: 10412079002** Collected: 11/17/17 13:20 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**85.3**	ug/m3	3.0	1.26		12/01/17 04:18	67-64-1	
Benzene	**2730**	ug/m3	20.5	63		12/01/17 04:49	71-43-2	
Benzyl chloride	ND	ug/m3	1.3	1.26		12/01/17 04:18	100-44-7	
Bromodichloromethane	ND	ug/m3	1.7	1.26		12/01/17 04:18	75-27-4	
Bromoform	ND	ug/m3	2.6	1.26		12/01/17 04:18	75-25-2	
Bromomethane	ND	ug/m3	1.0	1.26		12/01/17 04:18	74-83-9	
1,3-Butadiene	ND	ug/m3	0.57	1.26		12/01/17 04:18	106-99-0	
2-Butanone (MEK)	ND	ug/m3	3.8	1.26		12/01/17 04:18	78-93-3	
Carbon disulfide	ND	ug/m3	0.79	1.26		12/01/17 04:18	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.81	1.26		12/01/17 04:18	56-23-5	
Chlorobenzene	ND	ug/m3	1.2	1.26		12/01/17 04:18	108-90-7	
Chloroethane	ND	ug/m3	0.68	1.26		12/01/17 04:18	75-00-3	
Chloroform	ND	ug/m3	0.62	1.26		12/01/17 04:18	67-66-3	
Chloromethane	ND	ug/m3	0.53	1.26		12/01/17 04:18	74-87-3	
Cyclohexane	ND	ug/m3	0.88	1.26		12/01/17 04:18	110-82-7	
Dibromochloromethane	ND	ug/m3	2.2	1.26		12/01/17 04:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.0	1.26		12/01/17 04:18	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.5	1.26		12/01/17 04:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.5	1.26		12/01/17 04:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.5	1.26		12/01/17 04:18	106-46-7	
Dichlorodifluoromethane	**1.9**	ug/m3	1.3	1.26		12/01/17 04:18	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.0	1.26		12/01/17 04:18	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.52	1.26		12/01/17 04:18	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.0	1.26		12/01/17 04:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.0	1.26		12/01/17 04:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.0	1.26		12/01/17 04:18	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.2	1.26		12/01/17 04:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.2	1.26		12/01/17 04:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.2	1.26		12/01/17 04:18	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.8	1.26		12/01/17 04:18	76-14-2	
Ethanol	**33.5**	ug/m3	1.2	1.26		12/01/17 04:18	64-17-5	
Ethyl acetate	**13.2**	ug/m3	0.92	1.26		12/01/17 04:18	141-78-6	
Ethylbenzene	**8.8**	ug/m3	1.1	1.26		12/01/17 04:18	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.3	1.26		12/01/17 04:18	622-96-8	
n-Heptane	**4.9**	ug/m3	1.0	1.26		12/01/17 04:18	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.7	1.26		12/01/17 04:18	87-68-3	
n-Hexane	ND	ug/m3	45.4	63		12/01/17 04:49	110-54-3	
2-Hexanone	ND	ug/m3	5.2	1.26		12/01/17 04:18	591-78-6	
Methylene Chloride	**351**	ug/m3	222	63		12/01/17 04:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.2	1.26		12/01/17 04:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.6	1.26		12/01/17 04:18	1634-04-4	
Naphthalene	ND	ug/m3	3.4	1.26		12/01/17 04:18	91-20-3	
2-Propanol	**14.4**	ug/m3	3.2	1.26		12/01/17 04:18	67-63-0	
Propylene	**11.1**	ug/m3	0.44	1.26		12/01/17 04:18	115-07-1	
Styrene	ND	ug/m3	1.1	1.26		12/01/17 04:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.88	1.26		12/01/17 04:18	79-34-5	
Tetrachloroethene	**1.6**	ug/m3	0.87	1.26		12/01/17 04:18	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 1 **Lab ID: 10412079002** Collected: 11/17/17 13:20 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	0.76	1.26		12/01/17 04:18	109-99-9	
Toluene	**81.5**	ug/m3	0.97	1.26		12/01/17 04:18	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	4.8	1.26		12/01/17 04:18	120-82-1	
1,1,1-Trichloroethane	**2.6**	ug/m3	1.4	1.26		12/01/17 04:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.69	1.26		12/01/17 04:18	79-00-5	
Trichloroethene	ND	ug/m3	0.69	1.26		12/01/17 04:18	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.4	1.26		12/01/17 04:18	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.0	1.26		12/01/17 04:18	76-13-1	
1,2,4-Trimethylbenzene	**3.9**	ug/m3	1.3	1.26		12/01/17 04:18	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.3	1.26		12/01/17 04:18	108-67-8	
Vinyl acetate	ND	ug/m3	2.3	1.26		12/01/17 04:18	108-05-4	
Vinyl chloride	ND	ug/m3	0.33	1.26		12/01/17 04:18	75-01-4	
m&p-Xylene	**31.1**	ug/m3	2.2	1.26		12/01/17 04:18	179601-23-1	
o-Xylene	**17.8**	ug/m3	1.1	1.26		12/01/17 04:18	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 5 INF **Lab ID: 10412079003** Collected: 11/17/17 10:30 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**29.3**	ug/m3	3.5	1.44		12/01/17 01:24	67-64-1	
Benzene	**3.6**	ug/m3	0.47	1.44		12/01/17 01:24	71-43-2	
Benzyl chloride	ND	ug/m3	1.5	1.44		12/01/17 01:24	100-44-7	
Bromodichloromethane	ND	ug/m3	2.0	1.44		12/01/17 01:24	75-27-4	
Bromoform	ND	ug/m3	3.0	1.44		12/01/17 01:24	75-25-2	
Bromomethane	ND	ug/m3	1.1	1.44		12/01/17 01:24	74-83-9	
1,3-Butadiene	ND	ug/m3	0.65	1.44		12/01/17 01:24	106-99-0	
2-Butanone (MEK)	ND	ug/m3	4.3	1.44		12/01/17 01:24	78-93-3	
Carbon disulfide	**7.4**	ug/m3	0.91	1.44		12/01/17 01:24	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.92	1.44		12/01/17 01:24	56-23-5	
Chlorobenzene	ND	ug/m3	1.4	1.44		12/01/17 01:24	108-90-7	
Chloroethane	ND	ug/m3	0.78	1.44		12/01/17 01:24	75-00-3	
Chloroform	ND	ug/m3	0.71	1.44		12/01/17 01:24	67-66-3	
Chloromethane	**1.0**	ug/m3	0.60	1.44		12/01/17 01:24	74-87-3	
Cyclohexane	ND	ug/m3	1.0	1.44		12/01/17 01:24	110-82-7	
Dibromochloromethane	ND	ug/m3	2.5	1.44		12/01/17 01:24	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.2	1.44		12/01/17 01:24	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.8	1.44		12/01/17 01:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.8	1.44		12/01/17 01:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.8	1.44		12/01/17 01:24	106-46-7	
Dichlorodifluoromethane	**1.8**	ug/m3	1.5	1.44		12/01/17 01:24	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	1.44		12/01/17 01:24	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.59	1.44		12/01/17 01:24	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	1.44		12/01/17 01:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	1.44		12/01/17 01:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	1.44		12/01/17 01:24	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	1.44		12/01/17 01:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	1.44		12/01/17 01:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	1.44		12/01/17 01:24	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.0	1.44		12/01/17 01:24	76-14-2	
Ethanol	**17.2**	ug/m3	1.4	1.44		12/01/17 01:24	64-17-5	
Ethyl acetate	ND	ug/m3	1.1	1.44		12/01/17 01:24	141-78-6	
Ethylbenzene	ND	ug/m3	1.3	1.44		12/01/17 01:24	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.4	1.44		12/01/17 01:24	622-96-8	
n-Heptane	ND	ug/m3	1.2	1.44		12/01/17 01:24	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.1	1.44		12/01/17 01:24	87-68-3	
n-Hexane	ND	ug/m3	1.0	1.44		12/01/17 01:24	110-54-3	
2-Hexanone	ND	ug/m3	6.0	1.44		12/01/17 01:24	591-78-6	
Methylene Chloride	ND	ug/m3	5.1	1.44		12/01/17 01:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	6.0	1.44		12/01/17 01:24	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	5.3	1.44		12/01/17 01:24	1634-04-4	
Naphthalene	**7.2**	ug/m3	3.8	1.44		12/01/17 01:24	91-20-3	
2-Propanol	ND	ug/m3	3.6	1.44		12/01/17 01:24	67-63-0	
Propylene	**1.0**	ug/m3	0.50	1.44		12/01/17 01:24	115-07-1	
Styrene	ND	ug/m3	1.3	1.44		12/01/17 01:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	1.44		12/01/17 01:24	79-34-5	
Tetrachloroethene	ND	ug/m3	0.99	1.44		12/01/17 01:24	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 5 INF **Lab ID: 10412079003** Collected: 11/17/17 10:30 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**0.99**	ug/m3	0.86	1.44		12/01/17 01:24	109-99-9	
Toluene	**2.0**	ug/m3	1.1	1.44		12/01/17 01:24	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	5.4	1.44		12/01/17 01:24	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.6	1.44		12/01/17 01:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.79	1.44		12/01/17 01:24	79-00-5	
Trichloroethene	ND	ug/m3	0.79	1.44		12/01/17 01:24	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.6	1.44		12/01/17 01:24	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.3	1.44		12/01/17 01:24	76-13-1	
1,2,4-Trimethylbenzene	**5.7**	ug/m3	1.4	1.44		12/01/17 01:24	95-63-6	
1,3,5-Trimethylbenzene	**2.1**	ug/m3	1.4	1.44		12/01/17 01:24	108-67-8	
Vinyl acetate	ND	ug/m3	2.6	1.44		12/01/17 01:24	108-05-4	
Vinyl chloride	ND	ug/m3	0.37	1.44		12/01/17 01:24	75-01-4	
m&p-Xylene	ND	ug/m3	2.5	1.44		12/01/17 01:24	179601-23-1	
o-Xylene	ND	ug/m3	1.3	1.44		12/01/17 01:24	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 6 Blower **Lab ID: 10412079004** Collected: 11/17/17 11:15 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	ND	ug/m3	14600	6041.6		12/01/17 05:53	67-64-1	
Benzene	**835000**	ug/m3	1960	6041.6		12/01/17 05:53	71-43-2	E
Benzyl chloride	ND	ug/m3	6340	6041.6		12/01/17 05:53	100-44-7	
Bromodichloromethane	ND	ug/m3	8220	6041.6		12/01/17 05:53	75-27-4	
Bromoform	ND	ug/m3	12700	6041.6		12/01/17 05:53	75-25-2	
Bromomethane	ND	ug/m3	4770	6041.6		12/01/17 05:53	74-83-9	
1,3-Butadiene	ND	ug/m3	2720	6041.6		12/01/17 05:53	106-99-0	
2-Butanone (MEK)	ND	ug/m3	18100	6041.6		12/01/17 05:53	78-93-3	
Carbon disulfide	ND	ug/m3	3810	6041.6		12/01/17 05:53	75-15-0	
Carbon tetrachloride	ND	ug/m3	3870	6041.6		12/01/17 05:53	56-23-5	
Chlorobenzene	ND	ug/m3	5680	6041.6		12/01/17 05:53	108-90-7	
Chloroethane	ND	ug/m3	3260	6041.6		12/01/17 05:53	75-00-3	
Chloroform	ND	ug/m3	3000	6041.6		12/01/17 05:53	67-66-3	
Chloromethane	ND	ug/m3	2540	6041.6		12/01/17 05:53	74-87-3	
Cyclohexane	ND	ug/m3	4230	6041.6		12/01/17 05:53	110-82-7	
Dibromochloromethane	ND	ug/m3	10500	6041.6		12/01/17 05:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	9420	6041.6		12/01/17 05:53	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	7370	6041.6		12/01/17 05:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	7370	6041.6		12/01/17 05:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	7370	6041.6		12/01/17 05:53	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	6100	6041.6		12/01/17 05:53	75-71-8	
1,1-Dichloroethane	ND	ug/m3	4950	6041.6		12/01/17 05:53	75-34-3	
1,2-Dichloroethane	ND	ug/m3	2480	6041.6		12/01/17 05:53	107-06-2	
1,1-Dichloroethene	ND	ug/m3	4890	6041.6		12/01/17 05:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	4890	6041.6		12/01/17 05:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	4890	6041.6		12/01/17 05:53	156-60-5	
1,2-Dichloropropane	ND	ug/m3	5680	6041.6		12/01/17 05:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	5560	6041.6		12/01/17 05:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	5560	6041.6		12/01/17 05:53	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	8580	6041.6		12/01/17 05:53	76-14-2	
Ethanol	ND	ug/m3	5790	6041.6		12/01/17 05:53	64-17-5	
Ethyl acetate	ND	ug/m3	4410	6041.6		12/01/17 05:53	141-78-6	
Ethylbenzene	**32400**	ug/m3	5320	6041.6		12/01/17 05:53	100-41-4	
4-Ethyltoluene	ND	ug/m3	6040	6041.6		12/01/17 05:53	622-96-8	
n-Heptane	ND	ug/m3	5010	6041.6		12/01/17 05:53	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	13100	6041.6		12/01/17 05:53	87-68-3	
n-Hexane	ND	ug/m3	4350	6041.6		12/01/17 05:53	110-54-3	
2-Hexanone	ND	ug/m3	25200	6041.6		12/01/17 05:53	591-78-6	
Methylene Chloride	ND	ug/m3	21300	6041.6		12/01/17 05:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	25200	6041.6		12/01/17 05:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	22100	6041.6		12/01/17 05:53	1634-04-4	
Naphthalene	**103000**	ug/m3	16100	6041.6		12/01/17 05:53	91-20-3	
2-Propanol	ND	ug/m3	15100	6041.6		12/01/17 05:53	67-63-0	
Propylene	ND	ug/m3	2110	6041.6		12/01/17 05:53	115-07-1	
Styrene	**25700**	ug/m3	5260	6041.6		12/01/17 05:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4220	6041.6		12/01/17 05:53	79-34-5	
Tetrachloroethene	ND	ug/m3	4160	6041.6		12/01/17 05:53	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 6 Blower **Lab ID: 10412079004** Collected: 11/17/17 11:15 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	3620	6041.6		12/01/17 05:53	109-99-9	
Toluene	**513000**	ug/m3	4650	6041.6		12/01/17 05:53	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	22800	6041.6		12/01/17 05:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	6710	6041.6		12/01/17 05:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	3320	6041.6		12/01/17 05:53	79-00-5	
Trichloroethene	ND	ug/m3	3320	6041.6		12/01/17 05:53	79-01-6	
Trichlorofluoromethane	ND	ug/m3	6890	6041.6		12/01/17 05:53	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	9670	6041.6		12/01/17 05:53	76-13-1	
1,2,4-Trimethylbenzene	**42700**	ug/m3	6040	6041.6		12/01/17 05:53	95-63-6	
1,3,5-Trimethylbenzene	**25800**	ug/m3	6040	6041.6		12/01/17 05:53	108-67-8	
Vinyl acetate	ND	ug/m3	10800	6041.6		12/01/17 05:53	108-05-4	
Vinyl chloride	ND	ug/m3	1570	6041.6		12/01/17 05:53	75-01-4	
m&p-Xylene	**165000**	ug/m3	10700	6041.6		12/01/17 05:53	179601-23-1	
o-Xylene	**51600**	ug/m3	5320	6041.6		12/01/17 05:53	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 6 Oxidizer **Lab ID: 10412079005** Collected: 11/17/17 11:20 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	ND	ug/m3	3.2	1.34		12/01/17 02:00	67-64-1	
Benzene	**98.4**	ug/m3	0.44	1.34		12/01/17 02:00	71-43-2	
Benzyl chloride	ND	ug/m3	1.4	1.34		12/01/17 02:00	100-44-7	
Bromodichloromethane	ND	ug/m3	1.8	1.34		12/01/17 02:00	75-27-4	
Bromoform	ND	ug/m3	2.8	1.34		12/01/17 02:00	75-25-2	
Bromomethane	ND	ug/m3	1.1	1.34		12/01/17 02:00	74-83-9	
1,3-Butadiene	ND	ug/m3	0.60	1.34		12/01/17 02:00	106-99-0	
2-Butanone (MEK)	ND	ug/m3	4.0	1.34		12/01/17 02:00	78-93-3	
Carbon disulfide	ND	ug/m3	0.84	1.34		12/01/17 02:00	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.86	1.34		12/01/17 02:00	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	1.34		12/01/17 02:00	108-90-7	
Chloroethane	ND	ug/m3	0.72	1.34		12/01/17 02:00	75-00-3	
Chloroform	ND	ug/m3	0.66	1.34		12/01/17 02:00	67-66-3	
Chloromethane	**0.88**	ug/m3	0.56	1.34		12/01/17 02:00	74-87-3	
Cyclohexane	**3.0**	ug/m3	0.94	1.34		12/01/17 02:00	110-82-7	
Dibromochloromethane	ND	ug/m3	2.3	1.34		12/01/17 02:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.1	1.34		12/01/17 02:00	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.6	1.34		12/01/17 02:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.6	1.34		12/01/17 02:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.6	1.34		12/01/17 02:00	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.4	1.34		12/01/17 02:00	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		12/01/17 02:00	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.55	1.34		12/01/17 02:00	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.1	1.34		12/01/17 02:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		12/01/17 02:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		12/01/17 02:00	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	1.34		12/01/17 02:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.2	1.34		12/01/17 02:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.2	1.34		12/01/17 02:00	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.9	1.34		12/01/17 02:00	76-14-2	
Ethanol	ND	ug/m3	1.3	1.34		12/01/17 02:00	64-17-5	
Ethyl acetate	ND	ug/m3	0.98	1.34		12/01/17 02:00	141-78-6	
Ethylbenzene	ND	ug/m3	1.2	1.34		12/01/17 02:00	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.3	1.34		12/01/17 02:00	622-96-8	
n-Heptane	**7.1**	ug/m3	1.1	1.34		12/01/17 02:00	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.9	1.34		12/01/17 02:00	87-68-3	
n-Hexane	**14.6**	ug/m3	0.96	1.34		12/01/17 02:00	110-54-3	
2-Hexanone	ND	ug/m3	5.6	1.34		12/01/17 02:00	591-78-6	
Methylene Chloride	ND	ug/m3	4.7	1.34		12/01/17 02:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.6	1.34		12/01/17 02:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.9	1.34		12/01/17 02:00	1634-04-4	
Naphthalene	ND	ug/m3	3.6	1.34		12/01/17 02:00	91-20-3	
2-Propanol	ND	ug/m3	3.4	1.34		12/01/17 02:00	67-63-0	
Propylene	ND	ug/m3	0.47	1.34		12/01/17 02:00	115-07-1	
Styrene	ND	ug/m3	1.2	1.34		12/01/17 02:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.94	1.34		12/01/17 02:00	79-34-5	
Tetrachloroethene	ND	ug/m3	0.92	1.34		12/01/17 02:00	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 6 Oxidizer **Lab ID: 10412079005** Collected: 11/17/17 11:20 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	0.80	1.34		12/01/17 02:00	109-99-9	
Toluene	**18.5**	ug/m3	1.0	1.34		12/01/17 02:00	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	5.1	1.34		12/01/17 02:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		12/01/17 02:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.74	1.34		12/01/17 02:00	79-00-5	
Trichloroethene	ND	ug/m3	0.74	1.34		12/01/17 02:00	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.5	1.34		12/01/17 02:00	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.1	1.34		12/01/17 02:00	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	1.3	1.34		12/01/17 02:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.3	1.34		12/01/17 02:00	108-67-8	
Vinyl acetate	ND	ug/m3	2.4	1.34		12/01/17 02:00	108-05-4	
Vinyl chloride	ND	ug/m3	0.35	1.34		12/01/17 02:00	75-01-4	
m&p-Xylene	**4.0**	ug/m3	2.4	1.34		12/01/17 02:00	179601-23-1	
o-Xylene	ND	ug/m3	1.2	1.34		12/01/17 02:00	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 5 AST **Lab ID: 10412079006** Collected: 11/17/17 10:35 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	ND	ug/m3	1950	806.4		12/01/17 05:21	67-64-1	
Benzene	**5860**	ug/m3	262	806.4		12/01/17 05:21	71-43-2	
Benzyl chloride	ND	ug/m3	847	806.4		12/01/17 05:21	100-44-7	
Bromodichloromethane	ND	ug/m3	1100	806.4		12/01/17 05:21	75-27-4	
Bromoform	ND	ug/m3	1690	806.4		12/01/17 05:21	75-25-2	
Bromomethane	ND	ug/m3	637	806.4		12/01/17 05:21	74-83-9	
1,3-Butadiene	ND	ug/m3	363	806.4		12/01/17 05:21	106-99-0	
2-Butanone (MEK)	ND	ug/m3	2420	806.4		12/01/17 05:21	78-93-3	
Carbon disulfide	ND	ug/m3	508	806.4		12/01/17 05:21	75-15-0	
Carbon tetrachloride	ND	ug/m3	516	806.4		12/01/17 05:21	56-23-5	
Chlorobenzene	ND	ug/m3	758	806.4		12/01/17 05:21	108-90-7	
Chloroethane	ND	ug/m3	435	806.4		12/01/17 05:21	75-00-3	
Chloroform	ND	ug/m3	400	806.4		12/01/17 05:21	67-66-3	
Chloromethane	ND	ug/m3	339	806.4		12/01/17 05:21	74-87-3	
Cyclohexane	ND	ug/m3	564	806.4		12/01/17 05:21	110-82-7	
Dibromochloromethane	ND	ug/m3	1400	806.4		12/01/17 05:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1260	806.4		12/01/17 05:21	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	984	806.4		12/01/17 05:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	984	806.4		12/01/17 05:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	984	806.4		12/01/17 05:21	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	814	806.4		12/01/17 05:21	75-71-8	
1,1-Dichloroethane	ND	ug/m3	661	806.4		12/01/17 05:21	75-34-3	
1,2-Dichloroethane	ND	ug/m3	331	806.4		12/01/17 05:21	107-06-2	
1,1-Dichloroethene	ND	ug/m3	653	806.4		12/01/17 05:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	653	806.4		12/01/17 05:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	653	806.4		12/01/17 05:21	156-60-5	
1,2-Dichloropropane	ND	ug/m3	758	806.4		12/01/17 05:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	742	806.4		12/01/17 05:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	742	806.4		12/01/17 05:21	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1150	806.4		12/01/17 05:21	76-14-2	
Ethanol	ND	ug/m3	773	806.4		12/01/17 05:21	64-17-5	
Ethyl acetate	ND	ug/m3	589	806.4		12/01/17 05:21	141-78-6	
Ethylbenzene	ND	ug/m3	710	806.4		12/01/17 05:21	100-41-4	
4-Ethyltoluene	ND	ug/m3	806	806.4		12/01/17 05:21	622-96-8	
n-Heptane	ND	ug/m3	669	806.4		12/01/17 05:21	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	1750	806.4		12/01/17 05:21	87-68-3	
n-Hexane	ND	ug/m3	581	806.4		12/01/17 05:21	110-54-3	
2-Hexanone	ND	ug/m3	3360	806.4		12/01/17 05:21	591-78-6	
Methylene Chloride	**3540**	ug/m3	2850	806.4		12/01/17 05:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	3360	806.4		12/01/17 05:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	2960	806.4		12/01/17 05:21	1634-04-4	
Naphthalene	ND	ug/m3	2150	806.4		12/01/17 05:21	91-20-3	
2-Propanol	ND	ug/m3	2020	806.4		12/01/17 05:21	67-63-0	
Propylene	ND	ug/m3	282	806.4		12/01/17 05:21	115-07-1	
Styrene	ND	ug/m3	702	806.4		12/01/17 05:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	563	806.4		12/01/17 05:21	79-34-5	
Tetrachloroethene	ND	ug/m3	556	806.4		12/01/17 05:21	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 5 AST **Lab ID: 10412079006** Collected: 11/17/17 10:35 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	484	806.4		12/01/17 05:21	109-99-9	
Toluene	**2820**	ug/m3	621	806.4		12/01/17 05:21	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	3040	806.4		12/01/17 05:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	895	806.4		12/01/17 05:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	444	806.4		12/01/17 05:21	79-00-5	
Trichloroethene	ND	ug/m3	444	806.4		12/01/17 05:21	79-01-6	
Trichlorofluoromethane	ND	ug/m3	919	806.4		12/01/17 05:21	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	1290	806.4		12/01/17 05:21	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	806	806.4		12/01/17 05:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	806	806.4		12/01/17 05:21	108-67-8	
Vinyl acetate	ND	ug/m3	1440	806.4		12/01/17 05:21	108-05-4	
Vinyl chloride	ND	ug/m3	210	806.4		12/01/17 05:21	75-01-4	
m&p-Xylene	**4020**	ug/m3	1430	806.4		12/01/17 05:21	179601-23-1	
o-Xylene	**1210**	ug/m3	710	806.4		12/01/17 05:21	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 2 SVE **Lab ID: 10412079007** Collected: 11/17/17 15:05 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**18.9**	ug/m3	3.0	1.26		12/01/17 02:35	67-64-1	
Benzene	**4.1**	ug/m3	0.41	1.26		12/01/17 02:35	71-43-2	
Benzyl chloride	ND	ug/m3	1.3	1.26		12/01/17 02:35	100-44-7	
Bromodichloromethane	ND	ug/m3	1.7	1.26		12/01/17 02:35	75-27-4	
Bromoform	ND	ug/m3	2.6	1.26		12/01/17 02:35	75-25-2	
Bromomethane	ND	ug/m3	1.0	1.26		12/01/17 02:35	74-83-9	
1,3-Butadiene	ND	ug/m3	0.57	1.26		12/01/17 02:35	106-99-0	
2-Butanone (MEK)	ND	ug/m3	3.8	1.26		12/01/17 02:35	78-93-3	
Carbon disulfide	ND	ug/m3	0.79	1.26		12/01/17 02:35	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.81	1.26		12/01/17 02:35	56-23-5	
Chlorobenzene	ND	ug/m3	1.2	1.26		12/01/17 02:35	108-90-7	
Chloroethane	ND	ug/m3	0.68	1.26		12/01/17 02:35	75-00-3	
Chloroform	ND	ug/m3	0.62	1.26		12/01/17 02:35	67-66-3	
Chloromethane	ND	ug/m3	0.53	1.26		12/01/17 02:35	74-87-3	
Cyclohexane	ND	ug/m3	0.88	1.26		12/01/17 02:35	110-82-7	
Dibromochloromethane	ND	ug/m3	2.2	1.26		12/01/17 02:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.0	1.26		12/01/17 02:35	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.5	1.26		12/01/17 02:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.5	1.26		12/01/17 02:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.5	1.26		12/01/17 02:35	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.3	1.26		12/01/17 02:35	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.0	1.26		12/01/17 02:35	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.52	1.26		12/01/17 02:35	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.0	1.26		12/01/17 02:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.0	1.26		12/01/17 02:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.0	1.26		12/01/17 02:35	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.2	1.26		12/01/17 02:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.2	1.26		12/01/17 02:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.2	1.26		12/01/17 02:35	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.8	1.26		12/01/17 02:35	76-14-2	
Ethanol	**6.6**	ug/m3	1.2	1.26		12/01/17 02:35	64-17-5	
Ethyl acetate	ND	ug/m3	0.92	1.26		12/01/17 02:35	141-78-6	
Ethylbenzene	ND	ug/m3	1.1	1.26		12/01/17 02:35	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.3	1.26		12/01/17 02:35	622-96-8	
n-Heptane	ND	ug/m3	1.0	1.26		12/01/17 02:35	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.7	1.26		12/01/17 02:35	87-68-3	
n-Hexane	ND	ug/m3	0.91	1.26		12/01/17 02:35	110-54-3	
2-Hexanone	ND	ug/m3	5.2	1.26		12/01/17 02:35	591-78-6	
Methylene Chloride	ND	ug/m3	4.4	1.26		12/01/17 02:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.2	1.26		12/01/17 02:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	4.6	1.26		12/01/17 02:35	1634-04-4	
Naphthalene	ND	ug/m3	3.4	1.26		12/01/17 02:35	91-20-3	
2-Propanol	**4.4**	ug/m3	3.2	1.26		12/01/17 02:35	67-63-0	
Propylene	ND	ug/m3	0.44	1.26		12/01/17 02:35	115-07-1	
Styrene	ND	ug/m3	1.1	1.26		12/01/17 02:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.88	1.26		12/01/17 02:35	79-34-5	
Tetrachloroethene	ND	ug/m3	0.87	1.26		12/01/17 02:35	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 2 SVE **Lab ID: 10412079007** Collected: 11/17/17 15:05 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	0.76	1.26		12/01/17 02:35	109-99-9	
Toluene	**3.7**	ug/m3	0.97	1.26		12/01/17 02:35	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	4.8	1.26		12/01/17 02:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.4	1.26		12/01/17 02:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.69	1.26		12/01/17 02:35	79-00-5	
Trichloroethene	ND	ug/m3	0.69	1.26		12/01/17 02:35	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.4	1.26		12/01/17 02:35	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.0	1.26		12/01/17 02:35	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	1.3	1.26		12/01/17 02:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.3	1.26		12/01/17 02:35	108-67-8	
Vinyl acetate	ND	ug/m3	2.3	1.26		12/01/17 02:35	108-05-4	
Vinyl chloride	ND	ug/m3	0.33	1.26		12/01/17 02:35	75-01-4	
m&p-Xylene	ND	ug/m3	2.2	1.26		12/01/17 02:35	179601-23-1	
o-Xylene	ND	ug/m3	1.1	1.26		12/01/17 02:35	95-47-6	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 2 AST Off Gas **Lab ID: 10412079008** Collected: 11/17/17 15:00 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	ND	ug/m3	15600	6451.2		12/01/17 06:25	67-64-1	
Benzene	**39800**	ug/m3	2100	6451.2		12/01/17 06:25	71-43-2	
Benzyl chloride	ND	ug/m3	6770	6451.2		12/01/17 06:25	100-44-7	
Bromodichloromethane	ND	ug/m3	8770	6451.2		12/01/17 06:25	75-27-4	
Bromoform	ND	ug/m3	13600	6451.2		12/01/17 06:25	75-25-2	
Bromomethane	ND	ug/m3	5100	6451.2		12/01/17 06:25	74-83-9	
1,3-Butadiene	ND	ug/m3	2900	6451.2		12/01/17 06:25	106-99-0	
2-Butanone (MEK)	ND	ug/m3	19400	6451.2		12/01/17 06:25	78-93-3	
Carbon disulfide	ND	ug/m3	4060	6451.2		12/01/17 06:25	75-15-0	
Carbon tetrachloride	ND	ug/m3	4130	6451.2		12/01/17 06:25	56-23-5	
Chlorobenzene	ND	ug/m3	6060	6451.2		12/01/17 06:25	108-90-7	
Chloroethane	ND	ug/m3	3480	6451.2		12/01/17 06:25	75-00-3	
Chloroform	ND	ug/m3	3200	6451.2		12/01/17 06:25	67-66-3	
Chloromethane	ND	ug/m3	2710	6451.2		12/01/17 06:25	74-87-3	
Cyclohexane	ND	ug/m3	4520	6451.2		12/01/17 06:25	110-82-7	
Dibromochloromethane	ND	ug/m3	11200	6451.2		12/01/17 06:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	10100	6451.2		12/01/17 06:25	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	7870	6451.2		12/01/17 06:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	7870	6451.2		12/01/17 06:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	7870	6451.2		12/01/17 06:25	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	6520	6451.2		12/01/17 06:25	75-71-8	
1,1-Dichloroethane	ND	ug/m3	5290	6451.2		12/01/17 06:25	75-34-3	
1,2-Dichloroethane	ND	ug/m3	2640	6451.2		12/01/17 06:25	107-06-2	
1,1-Dichloroethene	ND	ug/m3	5230	6451.2		12/01/17 06:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	5230	6451.2		12/01/17 06:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	5230	6451.2		12/01/17 06:25	156-60-5	
1,2-Dichloropropane	ND	ug/m3	6060	6451.2		12/01/17 06:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	5940	6451.2		12/01/17 06:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	5940	6451.2		12/01/17 06:25	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	9160	6451.2		12/01/17 06:25	76-14-2	
Ethanol	ND	ug/m3	6180	6451.2		12/01/17 06:25	64-17-5	
Ethyl acetate	ND	ug/m3	4710	6451.2		12/01/17 06:25	141-78-6	
Ethylbenzene	ND	ug/m3	5680	6451.2		12/01/17 06:25	100-41-4	
4-Ethyltoluene	ND	ug/m3	6450	6451.2		12/01/17 06:25	622-96-8	
n-Heptane	ND	ug/m3	5350	6451.2		12/01/17 06:25	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	14000	6451.2		12/01/17 06:25	87-68-3	
n-Hexane	ND	ug/m3	4640	6451.2		12/01/17 06:25	110-54-3	
2-Hexanone	ND	ug/m3	26900	6451.2		12/01/17 06:25	591-78-6	
Methylene Chloride	ND	ug/m3	22800	6451.2		12/01/17 06:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	26900	6451.2		12/01/17 06:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	23600	6451.2		12/01/17 06:25	1634-04-4	
Naphthalene	ND	ug/m3	17200	6451.2		12/01/17 06:25	91-20-3	
2-Propanol	ND	ug/m3	16100	6451.2		12/01/17 06:25	67-63-0	
Propylene	ND	ug/m3	2260	6451.2		12/01/17 06:25	115-07-1	
Styrene	ND	ug/m3	5610	6451.2		12/01/17 06:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4500	6451.2		12/01/17 06:25	79-34-5	
Tetrachloroethene	ND	ug/m3	4440	6451.2		12/01/17 06:25	127-18-4	

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ANALYTICAL RESULTS

Project: Sparrows Point
Pace Project No.: 10412079

Sample: Cell 2 AST Off Gas **Lab ID: 10412079008** Collected: 11/17/17 15:00 Received: 11/22/17 09:45 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	3870	6451.2		12/01/17 06:25	109-99-9	
Toluene	ND	ug/m3	4970	6451.2		12/01/17 06:25	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	24300	6451.2		12/01/17 06:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	7160	6451.2		12/01/17 06:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	3550	6451.2		12/01/17 06:25	79-00-5	
Trichloroethene	ND	ug/m3	3550	6451.2		12/01/17 06:25	79-01-6	
Trichlorofluoromethane	ND	ug/m3	7350	6451.2		12/01/17 06:25	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	10300	6451.2		12/01/17 06:25	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	6440	6451.2		12/01/17 06:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	6440	6451.2		12/01/17 06:25	108-67-8	
Vinyl acetate	ND	ug/m3	11500	6451.2		12/01/17 06:25	108-05-4	
Vinyl chloride	ND	ug/m3	1680	6451.2		12/01/17 06:25	75-01-4	
m&p-Xylene	ND	ug/m3	11400	6451.2		12/01/17 06:25	179601-23-1	
o-Xylene	ND	ug/m3	5680	6451.2		12/01/17 06:25	95-47-6	

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QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10412079

QC Batch: 511175 | Analysis Method: TO-15
QC Batch Method: TO-15 | Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10412079001, 10412079002, 10412079003, 10412079004, 10412079005, 10412079006, 10412079007, 10412079008

METHOD BLANK: 2779865 | Matrix: Air
Associated Lab Samples: 10412079001, 10412079002, 10412079003, 10412079004, 10412079005, 10412079006, 10412079007, 10412079008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	11/30/17 12:37	
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.70	11/30/17 12:37	
1,1,2-Trichloroethane	ug/m3	ND	0.55	11/30/17 12:37	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	11/30/17 12:37	
1,1-Dichloroethane	ug/m3	ND	0.82	11/30/17 12:37	
1,1-Dichloroethene	ug/m3	ND	0.81	11/30/17 12:37	
1,2,4-Trichlorobenzene	ug/m3	ND	3.8	11/30/17 12:37	
1,2,4-Trimethylbenzene	ug/m3	ND	1.0	11/30/17 12:37	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	11/30/17 12:37	
1,2-Dichlorobenzene	ug/m3	ND	1.2	11/30/17 12:37	
1,2-Dichloroethane	ug/m3	ND	0.41	11/30/17 12:37	
1,2-Dichloropropane	ug/m3	ND	0.94	11/30/17 12:37	
1,3,5-Trimethylbenzene	ug/m3	ND	1.0	11/30/17 12:37	
1,3-Butadiene	ug/m3	ND	0.45	11/30/17 12:37	
1,3-Dichlorobenzene	ug/m3	ND	1.2	11/30/17 12:37	
1,4-Dichlorobenzene	ug/m3	ND	1.2	11/30/17 12:37	
2-Butanone (MEK)	ug/m3	ND	3.0	11/30/17 12:37	
2-Hexanone	ug/m3	ND	4.2	11/30/17 12:37	
2-Propanol	ug/m3	ND	2.5	11/30/17 12:37	
4-Ethyltoluene	ug/m3	ND	1.0	11/30/17 12:37	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	4.2	11/30/17 12:37	
Acetone	ug/m3	ND	2.4	11/30/17 12:37	
Benzene	ug/m3	ND	0.32	11/30/17 12:37	
Benzyl chloride	ug/m3	ND	1.0	11/30/17 12:37	
Bromodichloromethane	ug/m3	ND	1.4	11/30/17 12:37	
Bromoform	ug/m3	ND	2.1	11/30/17 12:37	
Bromomethane	ug/m3	ND	0.79	11/30/17 12:37	
Carbon disulfide	ug/m3	ND	0.63	11/30/17 12:37	
Carbon tetrachloride	ug/m3	ND	0.64	11/30/17 12:37	
Chlorobenzene	ug/m3	ND	0.94	11/30/17 12:37	
Chloroethane	ug/m3	ND	0.54	11/30/17 12:37	
Chloroform	ug/m3	ND	0.50	11/30/17 12:37	
Chloromethane	ug/m3	ND	0.42	11/30/17 12:37	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	11/30/17 12:37	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	11/30/17 12:37	
Cyclohexane	ug/m3	ND	0.70	11/30/17 12:37	
Dibromochloromethane	ug/m3	ND	1.7	11/30/17 12:37	
Dichlorodifluoromethane	ug/m3	ND	1.0	11/30/17 12:37	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	11/30/17 12:37	
Ethanol	ug/m3	ND	0.96	11/30/17 12:37	

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10412079

METHOD BLANK: 2779865 Matrix: Air

Associated Lab Samples: 10412079001, 10412079002, 10412079003, 10412079004, 10412079005, 10412079006, 10412079007, 10412079008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethyl acetate	ug/m3	ND	0.73	11/30/17 12:37	
Ethylbenzene	ug/m3	ND	0.88	11/30/17 12:37	
Hexachloro-1,3-butadiene	ug/m3	ND	2.2	11/30/17 12:37	
m&p-Xylene	ug/m3	ND	1.8	11/30/17 12:37	
Methyl-tert-butyl ether	ug/m3	ND	3.7	11/30/17 12:37	
Methylene Chloride	ug/m3	ND	3.5	11/30/17 12:37	
n-Heptane	ug/m3	ND	0.83	11/30/17 12:37	
n-Hexane	ug/m3	ND	0.72	11/30/17 12:37	
Naphthalene	ug/m3	ND	2.7	11/30/17 12:37	
o-Xylene	ug/m3	ND	0.88	11/30/17 12:37	
Propylene	ug/m3	ND	0.35	11/30/17 12:37	
Styrene	ug/m3	ND	0.87	11/30/17 12:37	
Tetrachloroethene	ug/m3	ND	0.69	11/30/17 12:37	
Tetrahydrofuran	ug/m3	ND	0.60	11/30/17 12:37	
Toluene	ug/m3	ND	0.77	11/30/17 12:37	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	11/30/17 12:37	
trans-1,3-Dichloropropene	ug/m3	ND	0.92	11/30/17 12:37	
Trichloroethene	ug/m3	ND	0.55	11/30/17 12:37	
Trichlorofluoromethane	ug/m3	ND	1.1	11/30/17 12:37	
Vinyl acetate	ug/m3	ND	1.8	11/30/17 12:37	MN
Vinyl chloride	ug/m3	ND	0.26	11/30/17 12:37	

LABORATORY CONTROL SAMPLE: 2779866

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	51.6	93	70-134	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	66.0	95	70-130	
1,1,2-Trichloroethane	ug/m3	55.5	56.8	102	70-130	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	79.1	101	70-130	
1,1-Dichloroethane	ug/m3	41.1	44.6	108	70-130	
1,1-Dichloroethene	ug/m3	40.3	38.6	96	70-130	
1,2,4-Trichlorobenzene	ug/m3	75.4	65.7	87	60-150	
1,2,4-Trimethylbenzene	ug/m3	50	51.8	104	70-136	
1,2-Dibromoethane (EDB)	ug/m3	78.1	77.0	99	70-130	
1,2-Dichlorobenzene	ug/m3	61.1	56.0	92	70-139	
1,2-Dichloroethane	ug/m3	41.1	39.9	97	70-130	
1,2-Dichloropropane	ug/m3	47	50.0	106	70-131	
1,3,5-Trimethylbenzene	ug/m3	50	48.6	97	70-133	
1,3-Butadiene	ug/m3	22.5	22.9	102	70-130	
1,3-Dichlorobenzene	ug/m3	61.1	57.2	94	70-144	
1,4-Dichlorobenzene	ug/m3	61.1	58.0	95	70-139	
2-Butanone (MEK)	ug/m3	30	32.7	109	70-130	
2-Hexanone	ug/m3	104	112	107	70-138	

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10412079

LABORATORY CONTROL SAMPLE: 2779866

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Propanol	ug/m3	125	124	100	70-130	
4-Ethyltoluene	ug/m3	50	50.2	101	70-135	
4-Methyl-2-pentanone (MIBK)	ug/m3	104	108	104	70-130	
Acetone	ug/m3	121	118	98	64-130	
Benzene	ug/m3	32.5	34.9	107	70-130	
Benzyl chloride	ug/m3	52.6	49.4	94	70-144	
Bromodichloromethane	ug/m3	68.1	64.0	94	70-134	
Bromoform	ug/m3	105	89.2	85	70-150	
Bromomethane	ug/m3	39.5	41.2	104	70-130	
Carbon disulfide	ug/m3	31.6	34.2	108	70-134	
Carbon tetrachloride	ug/m3	64	57.6	90	68-150	
Chlorobenzene	ug/m3	46.8	46.5	99	70-132	
Chloroethane	ug/m3	26.8	27.9	104	70-132	
Chloroform	ug/m3	49.6	50.1	101	70-130	
Chloromethane	ug/m3	21	21.3	101	70-130	
cis-1,2-Dichloroethene	ug/m3	40.3	36.6	91	70-133	
cis-1,3-Dichloropropene	ug/m3	46.1	46.3	100	70-137	
Cyclohexane	ug/m3	35	38.4	110	70-130	
Dibromochloromethane	ug/m3	86.6	74.3	86	70-144	
Dichlorodifluoromethane	ug/m3	50.3	46.3	92	70-130	
Dichlorotetrafluoroethane	ug/m3	71	69.1	97	70-130	
Ethanol	ug/m3	91.6	101	110	70-136	
Ethyl acetate	ug/m3	36.6	38.2	104	70-130	
Ethylbenzene	ug/m3	44.1	45.3	103	70-134	
Hexachloro-1,3-butadiene	ug/m3	108	96.4	89	45-150	
m&p-Xylene	ug/m3	88.3	89.6	102	70-130	
Methyl-tert-butyl ether	ug/m3	91.6	88.7	97	66-148	
Methylene Chloride	ug/m3	177	175	99	67-133	
n-Heptane	ug/m3	41.6	46.3	111	70-130	
n-Hexane	ug/m3	35.8	40.7	114	67-132	
Naphthalene	ug/m3	53.3	42.9	81	53-150	
o-Xylene	ug/m3	44.1	44.7	101	70-130	
Propylene	ug/m3	17.5	19.2	110	70-135	
Styrene	ug/m3	43.3	42.3	98	70-139	
Tetrachloroethene	ug/m3	68.9	62.8	91	70-130	
Tetrahydrofuran	ug/m3	30	33.2	111	70-130	
Toluene	ug/m3	38.3	37.8	99	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	43.3	107	70-131	
trans-1,3-Dichloropropene	ug/m3	46.1	43.8	95	70-142	
Trichloroethene	ug/m3	54.6	56.5	103	70-130	
Trichlorofluoromethane	ug/m3	57.1	54.2	95	70-130	
Vinyl acetate	ug/m3	35.8	35.5	99	70-137	SS
Vinyl chloride	ug/m3	26	27.0	104	70-130	

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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10412079

SAMPLE DUPLICATE: 2780686

Parameter	Units	10411116001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND		25	
1,1,2-Trichloroethane	ug/m3	ND	ND		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
1,2,4-Trichlorobenzene	ug/m3	ND	ND		25	
1,2,4-Trimethylbenzene	ug/m3	ND	.5J		25	
1,2-Dibromoethane (EDB)	ug/m3	ND	ND		25	
1,2-Dichlorobenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,2-Dichloropropane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	ND	ND		25	
1,3-Butadiene	ug/m3	ND	ND		25	
1,3-Dichlorobenzene	ug/m3	ND	ND		25	
1,4-Dichlorobenzene	ug/m3	ND	ND		25	
2-Butanone (MEK)	ug/m3	ND	1.3J		25	
2-Hexanone	ug/m3	ND	ND		25	
2-Propanol	ug/m3	72.4	70.1	3	25	
4-Ethyltoluene	ug/m3	ND	ND		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	ND		25	
Acetone	ug/m3	27.0	25.8	5	25	
Benzene	ug/m3	0.72	0.65	11	25	
Benzyl chloride	ug/m3	ND	ND		25	
Bromodichloromethane	ug/m3	ND	ND		25	
Bromoform	ug/m3	ND	ND		25	
Bromomethane	ug/m3	ND	ND		25	
Carbon disulfide	ug/m3	ND	ND		25	
Carbon tetrachloride	ug/m3	ND	.4J		25	
Chlorobenzene	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
Chloroform	ug/m3	ND	ND		25	
Chloromethane	ug/m3	0.87	0.88	2	25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
cis-1,3-Dichloropropene	ug/m3	ND	ND		25	
Cyclohexane	ug/m3	ND	ND		25	
Dibromochloromethane	ug/m3	ND	ND		25	
Dichlorodifluoromethane	ug/m3	1.7	1.6	7	25	
Dichlorotetrafluoroethane	ug/m3	ND	ND		25	
Ethanol	ug/m3	10.9	8.4	26	25	R1
Ethyl acetate	ug/m3	3.0	2.9	4	25	
Ethylbenzene	ug/m3	ND	.38J		25	
Hexachloro-1,3-butadiene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	ND	1.3J		25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	4.6	4.4	6	25	
n-Heptane	ug/m3	ND	ND		25	

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Sparrows Point
Pace Project No.: 10412079

SAMPLE DUPLICATE: 2780686

Parameter	Units	10411116001 Result	Dup Result	RPD	Max RPD	Qualifiers
n-Hexane	ug/m3	0.84	0.82	3	25	
Naphthalene	ug/m3	ND	ND		25	
o-Xylene	ug/m3	ND	.53J		25	
Propylene	ug/m3	ND	ND		25	
Styrene	ug/m3	ND	ND		25	
Tetrachloroethene	ug/m3	ND	ND		25	
Tetrahydrofuran	ug/m3	ND	ND		25	
Toluene	ug/m3	2.6	2.2	20	25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
trans-1,3-Dichloropropene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Trichlorofluoromethane	ug/m3	ND	ND		25	
Vinyl acetate	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

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(612)607-1700

QUALIFIERS

Project: Sparrows Point
Pace Project No.: 10412079

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.

SAMPLE QUALIFIERS

Sample: 10412079001

[1] This result is reported from a serial dilution.

Sample: 10412079004

[1] This result is reported from a serial dilution.

Sample: 10412079006

[1] This result is reported from a serial dilution.

Sample: 10412079008

[1] This result is reported from a serial dilution.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
MN	The reporting limit has been raised in accordance with Minnesota Statutes 4740.2100 Subpart 8. C, D. Reporting Limit Evaluation Rule.
R1	RPD value was outside control limits.
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sparrows Point
Pace Project No.: 10412079

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10412079001	**Cell 3**	TO-15	511175		
10412079002	**Cell 1**	TO-15	511175		
10412079003	**Cell 5 INF**	TO-15	511175		
10412079004	**Cell 6 Blower**	TO-15	511175		
10412079005	**Cell 6 Oxidizer**	TO-15	511175		
10412079006	**Cell 5 AST**	TO-15	511175		
10412079007	**Cell 2 SVE**	TO-15	511175		
10412079008	**Cell 2 AST Off Gas**	TO-15	511175		

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10412079

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AIR: CHAIN-OF-CUSTODY / Analytical Request Document

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

30107

Page: 1 of 1

Section A Required Client Information:
Company: Enviro Analytics Group
Address: 1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To: James
Phone:
Fax:
Requested Due Date/TAT: STD

Section B Required Project Information:
Report To: Josh Burke
Copy To: James Calenda
Purchase Order No.:
Project Name:
Project Number:

Section C Invoice Information:
Attention: Laura Sargent
Company Name: Enviro Analytics Group
Address: 1650 Des Peres Rd, Suite 303, St. Louis, MO 63131
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #: 34460

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☒ Other

Location of Sampling by State: MD

Reporting Units: ug/m³ X mg/m³ ___ PPBV X PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other___

Method:

Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE - END/GRAB DATE	COLLECTED COMPOSITE - END/GRAB TIME	Canister Pressure (Initial Field - In Hg)	Canister Pressure (Final Field - In Hg)	Summa Can Number	Flow Control Number	PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	Cell 3			11-17-17	1410					676							X				001
2	Cell 1				1320					601							X				002
3	Cell 5 INF				1030					656							X				003
4	Cell 6 Blower				1115					199							X				004
5	Cell 6 Oxidizer				1120					1681							X				005
6	Cell 5 AST				1035					519							X				006
7	Cell 2 SVE				1505					160							X				007
8	Cell 2 AST Off Gas				1500					2417							X				008
9																					
10																					
11																					
12																					

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Jeff Wilson/EDC	11-17	1530	Pace	11/22/17	0945

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
AMB	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jeff Wilson
SIGNATURE of SAMPLER: Jeff Wilson
DATE Signed (MM / DD / YY): 11-17-17

ORIGINAL

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

FC046Rev.01, 03Feb2010

Pace Analytical	Document Name: Air Sample Condition Upon Receipt	Document Revised: 16Oct2017 Page 1 of 1
	Document No.: F-MN-A-106-rev.13	Issuing Authority: Pace Minnesota Quality Office

Air Sample Condition Upon Receipt

Client Name: E. A. G.

Project #: WO# : 10412079

10412079

Courier: ☑ Fed Ex ☐ UPS ☐ Speedee ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: 7476 3003 0694, 7476 3003 0709

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other: **Temp Blank rec:** ☐ Yes ☒ No

Temp. (TO17 and TO13 samples only) (°C): 0 **Corrected Temp (°C):** 6 **Thermom. Used:** ☐ 151401163 ☐ G87A9155100842

Temp should be above freezing to 6°C **Correction Factor:** 0 **Date & Initials of Person Examining Contents:** 11/22/17

Type of ice Received ☐ Blue ☐ Wet ☒ None

				Comments:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9. rec 8 gauges
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Media: Air Cap Airbag Filter TDT Passive				11. Individually Certified Cans Y N (list which samples)
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	12.

Samples Received:

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
Cell 3			0	+5					
1			+1	"					
5 INF			-2	"					
6 B/Dw			+2	"					
6 OXid			0	"					
5 AST			+1	"					
2 SVE			+1	"					
2 AST			+1	"					

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Date: 11/22/17

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

APPENDIX C

System Operations/Shut-Down Summary

JANUARY 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
1 •Cell 1 **(Off)** - Down until carbon filters are installed. •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	**2** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	**3** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**4** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**5** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 (On)	**6** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	**7** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On)
8 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	**9** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** - Wouldn't build up pressure •Cell 5 **(Off)** - System froze.	**10** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** - Needs PCL. Out of service. •Cell 5 **(Off)**	**11** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)** - Out of service. PLC is bad.	**12** •Cell 1 **(Off)** - Switched to carbon. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**13** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**14** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**
15 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**16** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**17** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**18** •Cell 1 **(Off)** - Ready to operate. Waiting on factory representative. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**19** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**20** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**21** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**
22 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**23** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**24** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**25** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**26** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**27** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**28** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**
29 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**30** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**31** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**				

---------- NOTES ----------

Cell 1 system off from 1/1 - 1/31 (31 days)
Cell 2 SVE system off from 1/1 - 1/2, 1/5 - 1/8 (6 days)
Cell 3 system off from 1/1 - 1/2, 1/6 - 1/31 (28 days)
Cell 5 system off from 1/9 - 1/31 (23 days)

FEBRUARY 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
			1 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** - PLC not working. Waiting for parts. •Cell 5 **(Off)** - PLC not working. Waiting for parts.	**2** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**3** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**4** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**
5 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**6** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**7** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	**8** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	**9** •Cell 1 **(Off)** - Scheduled to ship out to MASS for OHL. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** - NES working on unit. •Cell 5 **(Off)**	**10** •Cell 1 **(Off)** - Ready to be transported. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**11** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 **(Off)**
12 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 **(Off)**	**13** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** - Switching to carbon filters. •Cell 3 (On) •Cell 5 **(Off)**	**14** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**15** •Cell 1 **(Off)** - Shipped out to MASS. •Cell 2 GW (On) •Cell 2 SVE **(Off)** - Sparge motor serviced. •Cell 3 (On) •Cell 5 **(Off)**	**16** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**17** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**18** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**
19 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	**20** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 **(Off)**	**21** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 **(Off)**	**22** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)** - Pump getting replaced.	**23** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - Outlet tank high level alarm shut unit down.	**24** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - Program adjustements.	**25** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On)
26 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	**27** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) - Temporarily lost power. •Cell 5 (On)	**28** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) - Temporarily lost power. •Cell 5 (On)				

---------- NOTES ----------

Cell 1 system off from 2/1 - 2/28 (28 days)
Cell 2 SVE system off from 2/7 - 2/8, 2/11 - 2/13, 2/15, 2/18 - 2/21, 2/25 - 2/26 (12 days)
Cell 3 system off from 2/1 - 2/9, 2/17 - 2/19, 2/25 - 2/26 (14 days)
Cell 5 system off from 2/1 - 2/22 (22 days)

MARCH 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
			1 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) - Phase loss alarm. •Cell 5 (On)	**2** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**3** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**4** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
5 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**6** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**7** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**8** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**9** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - AST high level alarm.	**10** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** - Sparge pump locked up. •Cell 3 (On) •Cell 5 (On)	**11** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 (On)
12 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 (On)	**13** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**14** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**15** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**16** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**17** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**18** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
19 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**20** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**21** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**22** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**23** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**24** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**25** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
26 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**27** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) - Temporarily stopped due to high voltage alarm. •Cell 5 (On)	**28** •Cell 1 **(Off)** •Cell 2 GW **(Off)** - Air stripper cleaning. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**29** •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**30** •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**31** •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 **(Off)** - No electricity. •Cell 5 (On)	

---------- NOTES ----------

Cell 1 system off from 3/1 - 3/31 (31 days)
Cell 2 GW system off from 3/28 - 3/31 (4 days)
Cell 2 SVE system off from 3/10 - 3/12 (3 days)
Cell 3 system off from 3/31 (1 day)

APRIL 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
						1 •Cell 1 **(Off)** - Being hooked to power grid. •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 (On)
2 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 (On)	**3** •Cell 1 **(Off)** •Cell 2 GW **(Off)** - Being rewired to new NES system. •Cell 2 SVE (On) •Cell 3 (On) - Temporarily no power. •Cell 5 (On)	**4** •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE (On) - System update in progress. •Cell 3 (On) •Cell 5 (On)	**5** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** - System update in progress. •Cell 3 (On) •Cell 5 (On)	**6** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** - System update in progress. •Cell 3 (On) •Cell 5 (On)	**7** •Cell 1 (On) •Cell 2 GW **(Off)** - Stripper being repaired. Need new transformer. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**8** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 (On)
9 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**10** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) - Need sparge motor. •Cell 3 (On) •Cell 5 (On)	**11** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**12** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**13** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**14** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**15** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
16 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**17** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**18** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**19** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**20** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**21** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**22** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
23 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**24** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)** - Waiting for blower oil.	**25** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**26** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**27** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**28** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**29** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**
30 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	---------- N O T E S ---------- **Cell 1 system off from 4/1 - 4/5 (5 days)** **Cell 2 GW system off from 4/1 - 4/30 (30 days)** **Cell 2 SVE system off from 4/5 - 4/6, 4/8 (3 days)** **Cell 3 system off from 4/1 - 4/2 (2 days)** **Cell 5 system off from 4/24 - 4/30 (7 days)**					

MAY 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
	1 •Cell 1 (On) •Cell 2 GW (On) - Discharge reading not correct on display. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)** - Waiting for blower oil.	**2** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**3** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**4** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**5** •Cell 1 **(Off)** - No power. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** - No power. •Cell 5 **(Off)**	**6** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**
7 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**8** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**9** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**10** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**11** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**12** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**13** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**
14 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**15** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**16** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) - Waiting on parts for sparge. •Cell 3 (On) •Cell 5 **(Off)**	**17** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**18** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**19** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**20** •Cell 1 **(Off)** - Planned outage. •Cell 2 GW (On) •Cell 2 SVE **(Off)** - Planned outage •Cell 3 **(Off)** - Planned outage. •Cell 5 **(Off)**
21 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	**22** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)** - Dual phase oil.	**23** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**24** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - Ran out of defoamer. Temporarily off.	**25** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**26** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**27** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
28 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**29** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**30** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**31** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)			

---------- NOTES ----------

Cell 1 system off from 5/5, 5/20 - 5/21 (3 days)
Cell 2 SVE system off from 5/20 - 5/21 (2 days)
Cell 3 system off from 5/5, 5/20 - 5/21 (3 days)
Cell 5 system off from 5/1 - 5/22 (22 days)

JUNE 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
				1 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**2** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**3** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On)
4 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	**5** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE **(Off)** - Installing new sparge compressor. •Cell 3 (On) •Cell 5 (On)	**6** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**7** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**8** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**9** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**10** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
11 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**12** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**13** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**14** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**15** •Cell 1 **(Off)** - Power outage. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** - Power outage. •Cell 5 (On)	**16** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**17** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
18 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**19** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**20** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**21** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**22** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**23** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**24** •Cell 1 **(Off)** - Power outage. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
25 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**26** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**27** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**28** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**29** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**30** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	

---------- NOTES ----------

Cell 1 system off from 6/3 - 6/4, 6/15, 6/24 - 6/25 (5 days)
Cell 2 SVE system off from 6/3 - 6/5 (3 days)
Cell 3 system off from 6/3 - 6/4, 6/15 (3 days)

JULY 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
						1 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
2 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	3 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	4 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	5 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	6 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	7 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
9 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	10 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	11 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	12 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	13 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	14 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	15 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
16 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	17 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	18 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	19 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	20 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	21 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	22 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
23 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	24 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	25 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	26 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	27 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	28 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	29 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
30 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	31 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	---------- NOTES ---------- **Cell 1 system off from 7/22 - 7/23, 7/29 - 7/30 (4 days)**				

AUGUST 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
		1 •Cell 1 **(Off)** •Cell 2 GW **(Off)** - Pump replaced. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**2** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**3** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**4** •Cell 1 (On) •Cell 2 GW **(Off)** - Flow problem coming off air stripper. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**5** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
6 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**7** •Cell 1 (On) •Cell 2 GW **(Off)** - Issue of getting water to travel over. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**8** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**9** •Cell 1 (On) •Cell 2 GW **(Off)** - Replaced stripper pump. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**10** •Cell 1 (On) •Cell 2 GW **(Off)** - Replaced groundwater pump. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**11** •Cell 1 (On) •Cell 2 GW **(Off)** - NES reprogram on 8/16. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**12** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
13 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**14** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**15** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**16** •Cell 1 (On) •Cell 2 GW **(Off)** - NES reprogram. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**17** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**18** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**19** •Cell 1 **(Off)** •Cell 2 GW **(Off)** - Power outage. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
20 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**21** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**22** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**23** •Cell 1 **(Off)** - Planned outage. •Cell 2 GW **(Off)** - Planned outage. •Cell 2 SVE **(Off)** - Planned outage. •Cell 3 **(Off)** - Planned outage. •Cell 5 **(Off)** - Cleaned stripper.	**24** •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	**25** •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	**26** •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**
27 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	**28** •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**29** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**30** •Cell 1 **(Off)** - Power outage. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**31** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)		

---------- NOTES ----------

Cell 1 system off from 8/1, 8/18 - 8/20, 8/23 - 8/28, 8/30 (11 days)
Cell 2 GW System off from 8/1 - 8/2, 8/4 - 8/16, 8/19 - 8/20, 8/23 - 8/28 (23 days)
Cell 2 SVE system off from 8/23 - 8/27 (5 days)
Cell 3 system off from 8/23 - 8/27 (5 days)
Cell 5 system off from 8/23 - 8/28 (6 days)

SEPTEMBER 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
					1 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	2 •Cell 1 (On) •Cell 2 GW **(Off)** - Lost power. •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 (On)
3 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 (On)	4 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 (On)	5 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	6 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	7 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)** - Replacing carbon tanks.	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	9 •Cell 1 **(Off)** - Fault alarm. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
10 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	11 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	12 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	13 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	14 •Cell 1 (On) - Fault alarm. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	15 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	16 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
17 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	18 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	19 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	20 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	21 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	22 •Cell 1 (On) - Fault alarm. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	23 •Cell 1 **(Off)** - Fault alarm. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
24 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	25 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	26 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	27 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	28 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	29 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - Water leaks repaired.	30 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)

---------- NOTES ----------

Cell 1 system off from 9/9 - 9/10, 9/23 - 9/24 (4 days)
Cell 2 GW System off from 9/2 - 9/5, 9/16 - 9/18 (7 days)
Cell 2 SVE system off from 9/2 - 9/4 (3 days)
Cell 5 system off from 9/7 - 9/8 (2 days)

OCTOBER 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
1 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**2** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**3** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**4** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**5** •Cell 1 (On) •Cell 2 GW (On) - Temporary power outage. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**6** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**7** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
8 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**9** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**10** •Cell 1 (On) •Cell 2 GW (On) - Mag gauge broken. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**11** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**12** •Cell 1 (On) •Cell 2 GW (On) - MS high level alram. Drained MS Tank. Change bag filters. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - Inlet tank high level alarm.	**13** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**14** •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
15 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**16** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**17** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**18** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**19** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**20** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**21** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
22 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**23** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**24** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**25** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**26** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**27** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**28** •Cell 1 **(Off)** - Power outage. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** - Power outage. •Cell 5 **(Off)** - Ran out of acid.
29 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	**30** •Cell 1 (On) •Cell 2 GW (On) - Temporarily off from bad inlet transfuse pump. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - refilled acid drum.	**31** •Cell 1 (On) - Temporary power outage. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)				

---------- NOTES ----------

Cell 1 system off from 10/28 - 10/29 (2 days)
Cell 2 GW System off from 10/13 - 10/15 (3 days)
Cell 3 system off from 10/28 - 10/29 (2 days)
Cell 5 system off from 10/28 - 10/29 (2 days)

NOVEMBER 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
			1 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**2** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**3** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**4** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 (On)
5 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 (On) •Cell 5 (On)	**6** •Cell 1 (On) - MS high level alarm. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**7** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) - Framing pump room for insulation. •Cell 5 (On)	**8** •Cell 1 (On) •Cell 2 GW (On) - NAST Xfer pump alarm. •Cell 2 SVE (On) •Cell 3 **(Off)** - Turned off for insulation installation. •Cell 5 (On)	**9** •Cell 1 (On) •Cell 2 GW (On) - AST high leveling. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**10** •Cell 1 (On) - MS tank high level alarm. •Cell 2 GW (On) - AST high leveling. •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 (On)	**11** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 (On)
12 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** •Cell 5 (On)	**13** •Cell 1 (On) - SVE VFD fault alarm. Drained tank. •Cell 2 GW (On) - Air stripper high level alarm. Cleared defoamer. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)** - Out of acid.	**14** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**15** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**16** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**17** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**18** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)** - Booster blower dry.
19 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**20** •Cell 1 (On) - Drained MS tank. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	**21** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**22** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**23** •Cell 1 **(Off)** - MS tank needed to be drained. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**24** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**25** •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
26 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**27** •Cell 1 (On) - MS tank drained. Moisture separator high level alarm. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**28** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) - Moisture separator high level alarm. MS tank drained. •Cell 5 (On)	**29** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	**30** •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)		

---------- NOTES ----------

Cell 1 system off from 11/11 - 11/12, 11/18 - 11/19, 11/23 - 11/26 (8 days)
Cell 2 SVE System off from 11/4 - 11/5 (2 days)
Cell 3 system off from 11/8, 11/10 - 11/12 (4 days)
Cell 5 system off from 11/13 - 11/16, 11/18 - 11/20 (7 days)

DECEMBER 2017

SUN	MON	TUES	WED	THURS	FRI	SAT
					1 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	2 •Cell 1 **(Off)** - Moisture separator high level alarm. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
3 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	4 •Cell 1 (On) •Cell 2 GW (On) - Moisture level high level alarm. •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	5 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	6 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)** - Outlet tansfer pump not pushing enough.	7 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 **(Off)**	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - Flow meter replaced.	9 •Cell 1 **(Off)** - MS tank high level. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
10 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	11 •Cell 1 **(Off)** - MS tank drained and restored. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - Outlet high level.	12 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) - Reduced sparge. •Cell 3 (On) •Cell 5 (On)	13 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 **(Off)** - Drained MS tank. •Cell 5 (On)	14 •Cell 1 (On) - Temporary power outage. •Cell 2 GW **(Off)** - Power outage. Oxidizer would not restart. •Cell 2 SVE (On) - Temporary power outage. •Cell 3 (On) - Temporary poser outage. •Cell 5 (On) - Temporary power outage.	15 •Cell 1 (On) - Temporary power outage. •Cell 2 GW **(Off)** •Cell 2 SVE (On) - Temporary power outage. •Cell 3 (On) - Temporary power outage. •Cell 5 (On) - Temporary power outage.	16 •Cell 1 **(Off)** - MS tank high level. •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)
17 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	18 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	19 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On)	20 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - Outlet tank high levels.	21 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - Temporary power outage.	22 •Cell 1 (On) •Cell 2 GW (On) •Cell 2 SVE (On) •Cell 3 (On) •Cell 5 (On) - Outlet tank high leveling.	23 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**
24 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	25 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	26 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	27 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	28 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	29 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	30 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**
31 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	---------- NOTES ---------- **Cell 1 system off from 12/2 - 12/3, 12/9 - 12/11, 12/16 - 12/17, 12/23 - 12/31 (38 days)** **Cell 2 GW system off from 12/14 - 12/15, 12/23 - 12/31 (33 days)** **Cell 2 SVE System off from 12/23 - 12/31 (9 days)** **Cell 3 system off from 12/13, 12/23 - 12/31 (10 days)** **Cell 5 system off from 12/6 - 12/7, 12/23 - 12/31 (11 days)**					

APPENDIX D

Historical Data Summary

Coke Oven Historical Data - Cell 1 Groundwater Analytical Results

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	CO02-PZM006			ug/L															
1,1,1,2-Tetrachloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	25 U	25 U	25 U	5 U	5 U	25 U
1,2-Dibromoethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3.2 J
1,2-Dichloropropane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	100 U	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	10.4 2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	10 U	NS	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	5 J
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	4.8 2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Acetone	10 U	25 U	25 U	25 U	33.8	50 U	48.9	50 U	25 U	25 U	25 U	25 U	25 U	40.7 J	50 U	44.2 J	38 J	49.3 J	74.5
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	0.2 J2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	164,000	NS	97,500	218,000	152,000	53,400	187,000	170,000	168,000	159,000	267,000	236,000	205,000	145,000	312,000	339,000	191,000	15,700	241,000
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.24 J2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1.8 J	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.4 J	5 U	5 U	1.1 J	5 U	5 U	5 U	5 U	1.4 J
Chloroethane	4.8	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.6 J	5 U	5 U	5 U	5 U	5 U
Chloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	1 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	566	445	293	573	368	72	622	394	374	471	731	470	451 IS	367	267	367	225	271	335
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11.9 L2	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	1 U	8.6	5 U	9.8	8.5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	4.5 JB	5 U	5 U	5 U	5 U	5 U
Naphthalene	NS	608	374	834	413	5,780	968	599	373	562	664	476	392 IS	511	273	360	210	276	370
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1.5 J2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	36.3 2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	0.27 J2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	32.6	37.4	22.1	87.6	30	13.8	32.7	22.8	11.7	14.2	31.5	6.6	8.5 IS	6.7	6.4	7.2	5.5	5.8	9.2
Tetrachloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	626	1,960	339	5,350	884	3,850	7,150	1,540	156	951	15,400	2,690	2,500	1,070	243	122	136	43.5	104

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
trans-1,2-Dichloroethene	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
trans-1,3-Dichloropropene	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Trichloroethene	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Trichlorofluoromethane	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Vinyl chloride	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	2,150	1,940	1,290	3,330	1,220	1,360	3,380	1,840	753	1,180	4,310	1,630	1,590 ES	1,220	480	738	345	403	643

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO02-PZM041*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	8 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1.9 4c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	0.28 J4c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	NS	NS	NS	NS	100 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	NS	NS	NS	NS	36.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	8 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	NS	NS	NS	NS	8 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	3.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	36.3 L1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	376	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	0.69 J4c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	9.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO18-PZM006*			*ug/L*															
1,1,1,2-Tetrachloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	25 U	25 U	25 U	5 U	5 U	25 U
1,2-Dibromoethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	100 U	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	25.9 1c2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	10 U	NS	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	10.9 J
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	1.8 J
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1.9 1c2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	35.8	37.9	35	36.4	62.9	50 U	186	74.5	72.8	25 U	28.6 JL1	37.9 JL1	25 U	45.5 J	50 U	40.7 J	78.4	136	92.3
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	0.96 J1c2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	222,000	NS	155,000	361,000	146,000	196,000	82,600	38,300	13,200	61,000	73,600	265,000	227,000	198,000	227,000	669,000	365,000	454,000	293,000
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	2.8 1c2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	4.7	5 U	5.8	5 U	5 U	5.1	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8.1	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	1 U	5 U	5 U	5 U	5 U	5 U	11.5 L1BC9	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	1 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	59.9	86.2	67	78.3	40.6	53	62.4	10.6	4.7 J	14.4	17.2	49	57	44.4	38.7	98.8	51.1	86.8	43.2
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	1 U	5.4	5 U	6.1	8	5.5	7.2 B	5 U	6.1 B	5 U	5 U	5 U	5 U	4.7 JB	5 U	5 U	5 U	5 U	5 U
Naphthalene	NS	366	233	290	181	615	385	78.4	33.8	81.8	279	145	132	142	140	262	117	211	159
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	8.6 1c2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1.6 1c2c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	1 U	5 U	5 U	5 U	5 U	5 U	20.3	5 U	4.9 J	5 U	5 U	1.7 J	5 U	2.1 J	2.2 J	5 U	1.8 J	3.1 J	3.2 J
Tetrachloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	6,330	17,300	3,860	6,550	1,990	1,140	1,080	560	237	377	730	3,330	3,700	5,950	5,060	36,500	20,400	28,500	1,940
trans-1,2-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	2,740	2,690	2,570	2,990	1,870	2,170	1,960	592	380	202	279	796	1,130	859	680	2,520	1,310	2,260	1,010

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO93-PZM*			*ug/L*															
1,1,1,2-Tetrachloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	25 U	25 U	25 U	5 U	5 U	25 U
1,2-Dibromoethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	100 U	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	31.2 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	10 U	NS	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	20.5 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	14.3	25 U	25.7	29.6	39.9	50 U	111	50 U	25 U	25 U	29.9 JL1	25 U	25 U	55.4	50 U	50 U	42 J	62.9	58.5
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1.9 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	190,000	NS	193,000	250,000	95,800	1,190	218,000	236,000	302,000	269,000	318,000	276,000	507,000	209,000	335,000	180,000	230,000	230,000	215,000
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	26.8	5 U	5 U	5 U	3.5 J
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	17.8	16.8	16.7	14.8	5 U	5 U	14	9.5	12.3	10.1	21.3	12.8	38.2 IS	24.8	23.6	18.1	15.1 L2	19.7	16.4
Carbon tetrachloride	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	1 U	15.2	5 U	5 U	7.3	5 U	5 U	16.2	16.4	5 U	17.7	16.6	17.9 IS	15.2	5 U	5 U	10	12	12
Chloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	1 U	5 U	5 U	5 U	5 U	5 U	12.4 L1BC9	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	1 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	2,550	2,820	2,420	3,000	1,690	5 U	2,670	2,690	2,970	2,650	4,020 J	2,130	1,860	1,510	1,550	1,430	894	1,130	1,400
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	35.1	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	1 U	5 U	5 U	5 U	9.1	5 U	7 B	5 U	6.3 B	5 U	5 U	5 U	5 U	6.2 B	5 U	5 U	5 U	5 U	5 U
Naphthalene	NS	1,590	17,800	12,500	1,570	27.8	1,990	5,740	1,880	7,950	54,800	5,890	11,900	2,080 J	5,660	1,970	1,480	3,750	10,000
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.8 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	93.3 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	19.5 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	2,660	1,650	1,740	1,910	863	5 U	1,090	1,930	1,550	2,140	4,350 J	1,800	1,840	1,430	1,530	1,600	945	1,200	1,430
Tetrachloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	44,800	56,100	41,900	52,200	20,900	43.4	50,200	49,100	51,800	47,800	78,200	59,000	62,700	58,400	102,000	55,400	50,700	61,500	61,300
trans-1,2-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1.7 J
Trichlorofluoromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	36,400	37,300	32,100	40,500	22,000	18.3	33,500	34,600	37,000	34,600	51,000	25,400	25,000	17,300	32,200	17,800	10,600	15,300	19,500

U: Non-Detect, *NS: Not Sampled*

Coke Oven Historical Data - Cell 2 Groundwater Analytical Results

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	CO27-PZM012			ug/L															
1,1,1,2-Tetrachloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,1,1-Trichloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,1,2,2-Tetrachloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,1,2-Trichloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,1-Dichloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,1-Dichloroethene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,2,4-Trichlorobenzene	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	1 U	NS	NS	NS	5 U	25 U	5 U	25 U	1 U	1 U	5 U	1 U	5 U	25 U	25 U	5 U	1 U	1 U	25 U
1,2-Dibromoethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,2-Dichlorobenzene	10.9 U	NS	NS	NS	5 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,2-Dichloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,2-Dichloropropane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,3-Dichlorobenzene	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	10.9 U	NS	NS	NS	5 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	27.3 U	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	12.3	NS	NS	NS	NS	NS	NS	NS	3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	27.3 U	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	5 U	NS	NS	NS	25 U	50 U	25 U	50 U	5 U	5 U	10 U	5 U	25 U	50 U	50 U	10 U	5 U	5 U	3.5 J
2-Chloronaphthalene	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	5 U	NS	NS	NS	25 U	50 U	25 U	50 U	5 U	5 U	10 U	5 U	25 U	50 U	50 U	10 U	5 U	5 U	50 U
2-Methylphenol	32	NS	NS	NS	NS	NS	NS	NS	4.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitroaniline	27.3 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	27.3 U	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloroaniline	10.9 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	5 U	NS	NS	NS	25 U	50 U	25 U	50 U	5 U	5 U	10 U	5 U	25 U	50 U	50 U	10 U	5 U	5 U	50 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
4-Nitroaniline	27.3 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrophenol	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	5 U	NS	NS	NS	48.4	50 U	25 U	50 U	5 U	5.1 J	7.4 J	5 U	25 U	28.3 J	50 U	10 U	17.8	44.3	45.5 J
Benz[a]anthracene	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	27,400	NS	NS	NS	15,500	26,300	22,600	8,280	8,340	12,300	15,200	18,300	19,400	17,400	21,300	16,100	13,400	9,540	10,900
bis(2-chloroethoxy)methane	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	10.9 U	NS	NS	NS	NS	NS	NS	NS	0.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Bromoform	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Bromomethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Butylbenzylphthalate	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	10.9 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	0.35 J	0.85 J	2.2	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Carbon tetrachloride	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Chlorobenzene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	0.34 J	1 U	5 U	5 U	5 U	1 U	1 U	0.25 J	5 U
Chloroethane	4.3	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Chloroform	1 U	NS	NS	NS	5 U	5 U	10.5 L1BC9	5 U	1 U	1 U	1 U	1 U	5 U	1.3 J	5 U	1 U	1 U	1 U	5 U
Chloromethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
cis-1,2-Dichloroethene	1 U	NS	NS	NS	5 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
cis-1,3-Dichloropropene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Dibromochloromethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	228	NS	NS	NS	110	171	278	73.2	95.8	130	178	169	177	181	175	171	117	130	120
Hexachlorobenzene	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	1 U	NS	NS	NS	5 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Methylene Chloride	1 U	NS	NS	NS	7.9	5.8	5.1 B	5 U	1 U	1 U	1 U	1 U	5 U	4.5 JB	5 U	1 U	1 U	1 U	5 U
Naphthalene	NS	NS	NS	NS	731	1,440	1,650	596	937	1,720	4,030	3,080	756	1,230	1,330	5,670	1,910	1,280	863
Nitrobenzene	10.9 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-Nitroso-di-n-propylamine	10.9 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-Nitrosodiphenylamine	10.9 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	27.3 U	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	46.4	NS	NS	NS	NS	NS	NS	NS	3.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	0.26 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	342	NS	NS	NS	134	248	348	47.4	110	167	231	199	215	212	216	213	135	134	136
Tetrachloroethene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Toluene	9,290	NS	NS	NS	4,660	8,240	8,580	1,920	2,720	3,810	5,160	6,500	7,000	6,330	7,170	5,390	4,210	3,040	3,900
trans-1,2-Dichloroethene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
trans-1,3-Dichloropropene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Trichloroethene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Trichlorofluoromethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Vinyl chloride	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U
Xylenes	2,230	NS	NS	NS	1,050	1,800	2,470	661	793	1,070	1,580	1,790	1,610	1,540	1,550	1,500	1,010	1,060	1,060

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO27-PZM046*			*ug/L*															
1,1,1,2-Tetrachloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	0.99 J	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	1 U	NS	NS	NS	5 U	25 U	5 U	25 U	5 U	NS	25 U	5 U	5 U	25 U	25 U	25 U	5 U	5 U	25 U
1,2-Dibromoethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	11.3 U	NS	NS	NS	5 U	NS	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	11.3 U	NS	NS	NS	5 U	NS	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	28.2 U	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	29.5	NS	NS	NS	NS	NS	NS	NS	22.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	28.2 U	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	6.3	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	NS	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	9 J
2-Chloronaphthalene	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	5 U	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	NS	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Methylphenol	75.1	NS	NS	NS	NS	NS	NS	NS	37.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitroaniline	28.2 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	28.2 U	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloroaniline	11.3 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	5 U	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	NS	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
4-Nitroaniline	28.2 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrophenol	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	25.2	NS	NS	NS	25 U	50 U	75.4	50 U	25 U	NS	55.4	25 U	25 U	59.7	50 U	50 U	55.9	60	69.1
Benz[a]anthracene	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Benzene	402,000 C81c	NS	NS	NS	308,000	412,000	436,000	403,000	413,000	NS	374,000	448,000	436,000	98,000	218,000 H1	55,600	240,000	212,000	117,000
bis(2-chloroethoxy)methane	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	11.3 U	NS	NS	NS	NS	NS	NS	NS	0.28 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	11.3 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	2.1	NS	NS	NS	5 U	5 U	5 U	5 U	1.7 J	NS	7.3	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	3.7 J	5 U	3.5 J	1.9 J	2.1 J	5 U	2.2 J	1.9 J	1.3 J
Chloroethane	7.7	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	1 U	NS	NS	NS	5 U	5 U	11.1 L1BC9	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	1 U	NS	NS	NS	5 U	NS	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	994	NS	NS	NS	863	1,150	1,170	853	773	NS	1,240	1,120	979	464	633	35.4	474	505	375
Hexachlorobenzene	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	1 U	NS	NS	NS	5 U	NS	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	1 U	NS	NS	NS	6.4	6.2	5.7 B	5 U	6.3 B	NS	5 U	5 U	5 U	6 B	5 U	5 U	5 U	5 U	5 U
Naphthalene	NS	NS	NS	NS	731	1,160	7,110	20,800	11,400	NS	12,500	8,750	13,700	3,600	3,320	1,170	5,200	19,700	6,970
Nitrobenzene	11.3 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-Nitroso-di-n-propylamine	11.3 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-Nitrosodiphenylamine	11.3 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	28.2 U	NS	NS	NS	NS	NS	NS	NS	1.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	191	NS	NS	NS	NS	NS	NS	NS	59.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	24.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	350	NS	NS	NS	200	266	403	216	347	NS	357	258	238	157	104	7.8	72.8	88.4	44.7
Tetrachloroethene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	69,400	NS	NS	NS	55,800	83,700	68,000	56,800	63,500	NS	72,700	88,100	70,000	17,400	36,200	6,920	34,800	30,300	16,900

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
trans-1,2-Dichloroethene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	1.9 J	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	1 U	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes	14,300	NS	NS	NS	14,500	16,900	14,900	13,400	12,100	NS	18,600	20,000	18,200	4,350	8,680	617	9,100	7,850	4,330

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO36-PZM008*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	25 U	1 U	5 U	25 U	5 U	5 U	25 U	25 U	25 U	5 U	5 U	25 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	8.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	5 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	5 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	5 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	5 U	25 U	21.2 J	25 U	25 U	34.7 J	50 U	50 U	25 U	57.9	61.1
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	0.22 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	27,100	38,800	26,100	30,200	27,300	23,700	33,100	16,000	22,300	18,100	11,900	21,300	13,100	16,400	9,510
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	3.5 JB	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	5 U	0.5 J	1.6 J	8.2	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	67.7	107	97.7	72.1	88.4	75.3	131	31.5	59.9	59.4	16.9	54.3	58.3	59.8	21.4
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	NS	NS	NS	NS	5.8	5.8	5 U	5 U	0.97 J	5 U	5 U	5 U	5 U	6.3 B	5 U	5 U	5 U	5 U	5 U
Naphthalene	NS	NS	NS	NS	679	935	772	584	1,180	411	1,020	363	382	441	355	723	440	435	283
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	9.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	0.82 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	11	21.2	25.3	14.2	22.1	21.4	33	9.4	19.1	15.7	6	15.4	16.1	16.9	5.7
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	NS	NS	NS	NS	5,790	8,500	5,980	5,960	5,610	4,930	7,410	3,410	4,880	3,830	1,790	4,610	3,270	3,490	1,540
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes	NS	NS	NS	NS	1,260	1,970	1,780	1,460	1,630	1,340	2,160	917	1,210	990	682	1,370	1,150	1,040	631

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO36-PZM043*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	25 U	5 U	5 U	25 U	5 U	5 U	25 U	25 U	25 U	5 U	5 U	25 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	708	5 U	5 U	5 U	5 U	5 U	799 IS	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	4.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	17.4 J	25 U	25 U	29 J	50 U	50 U	25 U	93.7	45.9 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	0.35 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	14,800	31,300	29,000	41,500	26,500	36,300	21,800	42,200	25,400	23,600	37,300	15,400	17,100	31,500	30,400
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.51 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	6.8	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	23	60.3	91.9	104	71.5	78	64.9	116	71.6	54.7	38.4	101	31.9	43.4	42.9
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	NS	NS	NS	NS	6	7.1	5	5 U	6 B	5 U	5 U	5 U	5 U	5.3 B	5 U	5 U	5 U	5 U	5 U
Naphthalene	NS	NS	NS	NS	574	940	904	996	690	655	642	995	562	583	766	7,980	538	742	812
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	5.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	9.5	16.6	11.7	20.6	12.8	20.7	14	33	18.6	13.8	8.6	95.6	7.6	9.1	7.5
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	NS	NS	NS	NS	2,060	4,560	5,050	7,950	4,410	5,730	2,980	8,070	4,020	3,610	4,040	1,690	2,270	3,430	3,400
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes	NS	NS	NS	NS	381	1,090	1,470	1,770	1,120	1,240	860	1,900	1,040	847	626	836	553	704	675

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO37-PZM003*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	183	183	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	22,500	22,100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloromethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	413	375	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene Chloride	NS	NS	NS	NS	5.9	5.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NS	NS	NS	NS	1,470	1,730	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	381	415	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	NS	NS	NS	NS	14,200	15,900	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Trichloroethene	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Trichlorofluoromethane	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Xylenes	*NS*	*NS*	*NS*	*NS*	4,080	3,750	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO37-PZM038*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	NS	25 U	5 U	5 U	25 U	5 U	5 U	25 U	25 U	25 U	5 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	2.5 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	6.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	NS	50 U	25 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	5 U	10 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	NS	50 U	25 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	10.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	NS	50 U	25 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	25 U	50 U	NS	50 U	25 U	25 U	50 U	25 U	25 U	25.2 J	50 U	32 J	41.9 J	28.4	3.2 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	12,800	22,500 H1	NS	32,800	35,900	37,500	34,900	26,100	22,900	16,700	15,500	69,400	27	7,830	9,170
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.26 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Bromoform	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	NS	5 U	3.7 J	5 U	5 U	5 U	5 U	2.3 J	5 U	5 U	5 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.44 J	0.52 J
Chloroethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Chloroform	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	0.28 J
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	176	303 H1	NS	346	423	442	399	372	322	286	236	244	5 U	238	270
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	0.2 J
Methylene Chloride	NS	NS	NS	NS	6.1	5 U	NS	5 U	6.4 B	5 U	5 U	5 U	5 U	5 B	5 U	5 U	5 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	1,310	2,000 H1	NS	5,300	1,780	7,070	1,870	1,900	14,000	1,730	1,700	1,280	14.1	1,550	1,370
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	17.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	341	533 H1	NS	585	616	813	696	601	540	442	381	12.2	5 U	315	338
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Toluene	NS	NS	NS	NS	6,140	11,000 H1	NS	15,000	15,800	16,600	15,400	12,800	11,900	9,200	8,820	6,180	5.9	5,960	6,980
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	0.53 J
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Vinyl chloride	NS	NS	NS	NS	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
Xylenes	NS	NS	NS	NS	1,540	2,570	NS	2,880	3,340	3,280	NS	3,080	2,620	2,280	1,940	2,230	5 U	1,720	2,080

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO38-PZM006*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	25 U	5 U	1 U	5 U	1 U	5 U	25 U	5 U	5 U	1 U	1 U	25 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	5 U	10 U	5 U	25 U	50 U	10 U	10 U	5 U	5 U	2.6 J
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	5 U	10 U	5 U	25 U	50 U	10 U	10 U	5 U	5 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	5 U	10 U	5 U	25 U	50 U	10 U	10 U	5 U	5 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	5 U	10 U	5 U	25 U	35.4 J	10 U	10 U	12.2	35.5	54.7
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	13,000	14,100	10,400	16,500	13,100	14,400	12,300	10,400	9,350	8,080	8,650	10,700	7,130	6,090	5,690
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1.4	2.5	1 U	5 U	5 U	1.2	1 U	1 U	1 U	5 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	0.31 J	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Chloroform	NS	NS	NS	NS	5 U	5 U	10.4 L1BC9	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	96.6	97.1	118	123	127	150	148	134	104	67.4	107	269	76	94.9	72.2
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Methylene Chloride	NS	NS	NS	NS	6	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	4.3 JB	1 U	1 U	1 U	1 U	5 U
Naphthalene	NS	NS	NS	NS	626	748	611	819	800	1,660	2,900	2,890	780	615	1,150	6,620	1,730	2,070	1,190
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	71.5	56.4	57.1	126	97.9	90.4	78	96.3	49.4	27.2	83.6	340	48.8	51.9	42.5
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Toluene	NS	NS	NS	NS	1,910	1,270	1,360	3,610	1,890	2,200	2,040	2,260	1,970	543	2,050	7,210	1,330	1,350	970
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Vinyl chloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U
Xylenes	NS	NS	NS	NS	704	668	606	961	838	922	821	941	722	354	776	2,120	557	698	549

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO38-PZM043*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	5 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	0.27 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	10 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	10 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	10 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	25 U	50 U	25 U	10 U	6.4 J	5 U	10 U	5 U	5 U	10 U	10 U	10 U	6.9 J	55.4	3.1 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	95.8	342	46.4	10.3	7.4	11.8	5.7	4.6	9	5.1	4.5	1.4	7,280	7.2	1.2
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.24 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	0.58 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	0.61 J	0.63 J	1 U	1 U	1 U	0.41 J	0.43 J	1 U	1 U	1 U	0.37 J
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	5 U	5 U	11.4 L1BC9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	5 U	5 U	8.4	8.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	219	1 U	0.23 J
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	1 U	0.25 J	1 U	1 U	1 U	1 U	0.24 J	1 U	1 U	1 U	1 U	0.35 J
Methylene Chloride	NS	NS	NS	NS	5.7	6.6	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	11.6	72.5	10 U	4	0.64 J	6.3	3.2	2 U	2 U	2 U	2 U	2 U	1,260	3.2	1.1 J
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	280	1 U	1 U
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	14.1	46.8	5 U	2.2	1.3	2.7	1.3	1 U	1 U	0.2 J	1 U	1 U	4,810	0.71 J	1 U
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	NS	NS	NS	NS	5 U	15 U	5 U	3 U	1 U	1.9 J	0.85 J	1 U	1 U	3 U	3 U	3 U	1,370	1 U	1.2 J

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO39-PZM007*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	5 U	1 U	1 U	5 U	1 U	1 U	25 U	25 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	10 U	5 U	5 U	50 U	50 U	10 U	5 U	5 U	10 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	10 U	5 U	5 U	50 U	50 U	10 U	5 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	0.24 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	10 U	5 U	5 U	50 U	50 U	10 U	5 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	25 U	56.4	57.8	10 U	8.1 J	5 U	10 U	5 U	5 U	39.2 J	50 U	10 U	7.4 J	27.9	10 U
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	699	15,100	14,600	424	336	26,800	9,350	396	8,760	13,900	11,400	386	1,490	972	1,970
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	2.2	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1.3	2.8	1 U	1 U	5 U	5 U	1 U	1 U	1 U	0.57 J
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	0.15 J	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	5 U	5 U	11.2 L1BC9	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	5 U	52.3	63.7	2.7	2.3	141	87.2	3.3	41.2	90.3	71.1	2.8	7.1	8.4	13.8
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	6.1	7.9	6 B	1 U	1 U	1 U	1 U	1 U	1 U	5 JB	5 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	324	1,760	1,440	378	489	3,770	20,700	538	1,570	1,890	1,450	676	841	918	643
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	0.33 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	5 U	55.2	65.4	1.2	1.2	205	61.1	1.5	51.4	77	40.3	1.5	6.9	7.7	12.4
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	136	3,100	3,290	38.6	24.5	6,780	1,710	40.4	1,980	3,500	1,790	37.2	296	213	393
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Vinyl chloride	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U
Xylenes	NS	NS	NS	NS	28.5	495	565	18.4	13.5	1,140	460	18.5	357	599	376	15.9	60.1	56.1	98.3

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO39-PZM042*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	25 U	5 U	5 U	25 U	5 U	5 U	25 U	25 U	25 U	5 U	5 U	25 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	42.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	3.9 J
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	53.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	21.6 J	25 U	25 U	26.5 J	50 U	50 U	32.5 J	57.9	42.5 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	33,200	39,500	32,700	41,700	52,600	49,300	38,000	35,900	29,300	29,900	28,300	5,720	14,300	20,900	14,500
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.32 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	10.7	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5.2	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 J	5 U	5 U	0.83 J	5 U	5 U	5 U	5 U	5 U
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	NS	NS	NS	NS	5 U	5 U	11.4 L1BC9	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	349	355	409	340	466	133	428	369	276	298	227	63.3	111	223	140
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	5 U	1.6 J	5 U	1.2 J	5 U	2.6 J	1 J	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	NS	NS	NS	NS	5.6	6	5 U	5 U	5.7 B	5 U	5 U	5 U	5 U	4.9 JB	5 U	5 U	5 U	5 U	5 U
Naphthalene	NS	NS	NS	NS	1,810	1,750	2,000	1,840	1,920	675	8,540	4,880	7,680	1,870	1,640	1,050	1,320	1,540	1,470
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	95.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	13.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	549	606	536	552	701	207	710	544	464	442	338	97.9	170	338	203
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	NS	NS	NS	NS	13,500	15,400	13,000	15,700	18,200	16,700	13,800	15,400	12,600	11,700	10,700	2,220	4,480	8,150	5,720
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes	NS	NS	NS	NS	2,870	2,990	3,260	2,820	3,580	1,060	3,140	3,000	2,430	2,380	1,840	554	911	1,740	1,180

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO40-PZM008*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	25 U	5 U	5 U	25 U	5 U	5 U	25 U	5 U	25 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	2.6 J	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1.2 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	10 U	50 U	5 U	5 U	10 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	10 U	50 U	5 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.4 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	10 U	50 U	5 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	95.8	50 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	29.4 J	10 U	64	5 U	42.6	10 U
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	20,500	24,600	8,500	8,910	6,590	4,960	7,900	4,120	292	1,250	29	302	21.6	551	58.2
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.24 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	5 U	5 U	11.1 L1BC9	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	0.96 J	1 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	198	198	112	87.7	73.1	74	78.9	84.6	4.4 J	15	0.75 J	4.4 J	0.31 J	7.6	0.68 J
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	8.5	5.6	5.6 B	5 U	3.2 J	5 U	5 U	5 U	5 U	4.6 JB	1 U	5 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	38,300	1,990	12,400	13,600	8,380	17,900	13,800	9,670	376	1,130	89.2	287	8	354	32.6
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	2.1 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	229	275	136	128	105	107	109	34.7	5 U	18.2	1 U	4.1 J	1 U	5.5	1 U
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	7,350	7,690	2,470	2,930	1,910	1,600	1,960	2,750	123	382	16.1	89.2	1.2	82.9	5.2
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Vinyl chloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	1 U	1 U	1 U
Xylenes	NS	NS	NS	NS	1,470	1,570	1,030	901	849	851	NS	984	69.5	150	23	48.4	3.5	47.4	9.4

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO41-PZM001*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	25 U	25 U	25 U	5 U	5 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	3.2 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	9.9 J
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	0.73 J
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	5.5 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	37.8	50 U	93.7	50 U	25 U	25 U	25 U	25 U	25 U	39 J	50 U	22.7 J	25 U	91.8	7.6 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	74,500	92,200	111,000	98,600	76,200	74,900	1,160	15,500	5,170	13,500	12,200	20,500	1,220	1,960	17,800
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	2.2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.95 J
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Chloroform	NS	NS	NS	NS	5 U	5 U	11.6 L1BC9	5 U	5 U	5 U	5 U	5 U	5 U	1.1 J	5 U	5 U	5 U	5 U	1 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	1,570	1,270	1,380	1,010	990	1,020	129	312	66.9	112	130	314	23.2	59.5	392
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Methylene Chloride	NS	NS	NS	NS	7	5.6	7.2 B	5 U	3.1 J	5 U	5 U	5 U	5 U	4.4 JB	5 U	5 U	5 U	5 U	1 U
Naphthalene	NS	NS	NS	NS	996	1,250	919	677	707	645	120	194	66.6	98.7	186	280	18.9	45.7	271
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	13.4 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	5 U	113	144	95.5	5 U	70.8	7.9	12.6	3.3 J	1.8 J	2.9 J	10.8	1.1 J	1.2 J	3.8
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Toluene	NS	NS	NS	NS	56,300	50,300	64,900	45,700	42,600	43,000	1,640	10,000	3,170	6,570	5,060	12,700	801	1,490	11,900
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*1 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	26,400	20,200	35,700	16,400	16,300	15,500	1,660	3,570	864	1,060	1,220	3,420	238	569	4,010

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO41-PZM036*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	25 U	25 U	25 U	5 U	5 U	25 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	8.8 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	16.6 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	25 U	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	25 U	50 U	58.9	50 U	25 U	25 U	25 U	25 U	25 U	40 J	50 U	45.8 J	25 U	66.6	37.1 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	481,000	474,000	437,000	428,000	616,000	482,000	557,000	567,000	291,000	187,000	207,000	102,000	47,100	113,000	139,000
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.54 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	5 U	3.9 J	5 U	5 U	5 U	5 U	4.2 J	3.7 J	3.3 J	5 U	5 U	5 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5.3	5 U	5.2	5 U	3.3 J	2.9 J	5 U	1.8 J	1.7 J	2 J
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.25 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	1,120	1,240	1,200	1,210	1,260	1,380	1,320	1,280	1,200	845	887	858	605	592	621
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	17.3 L2	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	NS	NS	NS	NS	9.1	7.1	5 U	5 U	6.6 B	5 U	5 U	5 U	5 U	6 B	5 U	5 U	5 U	5 U	5 U
Naphthalene	NS	NS	NS	NS	274	373	345	339	282	330	327	328	190 IS	235	256	322	239	234	306
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	27.9 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	0.68 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	395	480	489	328	416	562	397	529	474 IS	389	418	420	263	264	287
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	NS	NS	NS	NS	131,000	135,000	123,000	141,000	138,000	137,000	175,000	167,000	116,000	77,300	80,800	57,900	21,600	31,700	42,500
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	27,600	24,800	27,400	27,700	30,000	29,600	40,700	29,200	26,000	19,000	21,800	25,600	9,420	10,200	12,600

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO42-PZM004*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	5 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	10 U	5 U	5 U	10 U	3.3 J	10 U	5 U	5 U	1 J
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	10 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	4.3 1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	10 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	26.5	78.7	74.6	10 U	5 U	5 U	6.8 J	5 U	5 U	5.8 J	6 J	10 U	25	48.6	10 U
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	873	6,800 H5	5,030	1,390	650	681	526	390	661	1,130	1,100	1 U	738	1,220	215
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 J
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	10	1 U	1 U	1 U	1 U	1 U	5.5	1 U	1 U	1 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	1 U	0.62 J	1 U	1 U	1 U	1 U	0.61 J	0.76 J	1 U	1 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.15 J	0.14 J	1 U	1 U	1 U	1 U
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	5 U	5 U	11.5 L1BC9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4	1 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.21 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	107	307	412	218	103	57.6	149	137	176	164	171	1 U	50.3	52.4	23.2
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	6.1	7.9	7 B	1 U	1 B	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	475	1,190	1,560	860	327	235	847	633	3,650	755	763	6.1	188	155	93.8
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	0.2 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	89.9	387	524	201	100	64.3	154	115	89.9	156	154	1 U	47.6	49.6	21.6
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	1,140	7,500 H5	8,060	3,020	1,310	984	1,300	1,130	1,700	2,230	2,200	1 U	1,010	1,930	398
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	NS	NS	NS	NS	1,150	2,870	3,580	2,160	908	534	1,370	1,330	1,930	1,630	1,730	3 U	562	464	356

U: Non-Detect, *NS: Not Sampled*

Coke Oven Historical Data - Cell 3 Groundwater Analytical Results

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	CO101-PZM			ug/L															
1,1,1,2-Tetrachloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,1,1-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,1,2-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,1-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,1-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	5 U	1 U	1 U	25 U	25 U	5 U	5 U	5 U	NS
1,2-Dibromoethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,2-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,2-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,2-Dichloropropane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
1,4-Dioxane	100 U	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	3.9 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	10 U	NS	25 U	25 U	25 U	50 U	25 U	10 U	5 U	5 U	25 U	5 U	5 U	50 U	50 U	10 U	25 U	994	NS
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	10 U	25 U	25 U	25 U	25 U	50 U	25 U	10 U	5 U	5 U	25 U	5 U	5 U	50 U	50 U	10 U	25 U	109	NS
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	5 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	10 U	25 U	25 U	25 U	25 U	50 U	25 U	10 U	5 U	5 U	25 U	5 U	5 U	50 U	50 U	10 U	25 U	25 U	NS
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Acetone	10 U	25 U	25 U	25 U	48.2	50 U	25 U	10 U	5 U	5 U	25 U	5 U	5 U	27 J	50 U	22.4 B	48.7 J	6,200	NS
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	0.33 JH21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	19,200	NS	18,000	23,500	13,600	18,000	17,700	2,240	15,600	22,400	27,900	26,800	23,800	21,200	17,700	17,400	10,400	5,690	NS
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.3 JH21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
Bromoform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
Bromomethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	2.2	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	0.5 J	5 U	1 U	1 U	5 U	3.9 J	1 U	5 U	5 U	NS
Carbon tetrachloride	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
Chlorobenzene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
Chloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
Chloroform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	2.7 J	5 U	1 U	5 U	5 U	NS
Chloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
cis-1,2-Dichloroethene	NS	5 U	5 U	5 U	5 U	NS	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
cis-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
Dibromochloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
Dichlorodifluoromethane	1 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	19.9	15.5	20.9	21.8	17	17.1	20.5	18.6	22	24.2	32.4	32.5	31.8 IS	20.4	15.4	21.3	4 J	5	NS
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	5 U	5 U	5 U	5 U	NS	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
Methylene Chloride	1 U	5 U	5 U	9.8	9.5	5 U	5 U	1 U	1 B	1 U	5 U	1 U	1 U	4.2 JB	5 U	1 U	5 U	5 U	NS
Naphthalene	NS	656	590	926	603	1,010	798	4,680	1,120	1,760	781	2,100	4,040	642	753	2,150	107	167	NS
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	4.1 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	0.26 JH21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	11.2	5.5	7.7	10	6.7	6.8	6.8	6.3	8.1	9.1	12.7	10.4	10.2 IS	6.2	5.9	6.6	5 U	5 U	NS
Tetrachloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U	5 U	NS
Toluene	1,470	702	1,240	1,660	945	1,100	1,130	500 U	1,310	1,460	1,730	1,900	1,630	1,100	925	1,220	235	316	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
trans-1,2-Dichloroethene	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*1 U*	*1 U*	*1 U*	*5 U*	*1 U*	*1 U*	*5 U*	*5 U*	*1 U*	*5 U*	*5 U*	*NS*
trans-1,3-Dichloropropene	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*1 U*	*1 U*	*1 U*	*5 U*	*1 U*	*1 U*	*5 U*	*5 U*	*1 U*	*5 U*	*5 U*	*NS*
Trichloroethene	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*1 U*	*1 U*	*1 U*	*5 U*	*1 U*	*1 U*	*5 U*	*5 U*	*1 U*	*5 U*	*5 U*	*NS*
Trichlorofluoromethane	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*1 U*	*1 U*	*1 U*	*5 U*	*1 U*	*1 U*	*5 U*	*5 U*	*1 U*	*5 U*	*5 U*	*NS*
Vinyl chloride	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*1 U*	*1 U*	*1 U*	*5 U*	*1 U*	*1 U*	*5 U*	*5 U*	*1 U*	*5 U*	*5 U*	*NS*
Xylenes	252	185	254	259	216	228	261	233	270	281	353	388	368 ES	237	174	249	41.5	63.7	*NS*

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO102-PZM*			*ug/L*															
1,1,1,2-Tetrachloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	25 U	5 U	25 U	5 U	5 U	5 U	NS	5 U	25 U	25 U	25 U	5 U	5 U	25 U
1,2-Dibromoethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	100 U	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	4.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	10 U	NS	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	8.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	50 U	50 U	50 U	25 U	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	22.7 J	50 U	67.7 B	25 U	89.4	50 U
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	0.22 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	15,800	NS	19,500	21,800	16,100	22,200	25,200	17,200	23,400	19,600	31,800	NS	23,000	19,200	29,800	15,700	11,900	25,200	22,300
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.21 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6.2	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	6.4	5 U	5 U	5 U	5 U	5 U
Chloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	3.3 J
cis-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	1 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	24.6	20.9	24.8	22.8	19	20.1	29.1	22.5	25.4	18.1	37.1	NS	33.7	24.6	28.4	19.6	20.8	25.8	24
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	1 U	7.6	5 U	8.5	6.6	5 U	5 U	5 U	6 B	5 U	5 U	NS	5 U	4.4 JB	5 U	5 U	5 U	5 U	5 U
Naphthalene	NS	922	914	3,540	916	1,330	1,230	1,370	1,340	891	1,180	NS	9,900	1,090	1,080	875	874	1,070	970
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	5.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	0.24 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	14.2	8.7	9.4	10.9	7.7	7.5	10.6	5.7	8.9	9.3	16.1	NS	11.1	7.7	8.6	6.1	6.3	8.1	8.3
Tetrachloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	1,350	915	1,380	1,560	1,040	1,280	1,510	1,100	1,190	1,110	2,610	NS	851	1,220	1,650	1,150	1,220	1,400	1,470
trans-1,2-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*NS*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	287	219	292	260	231	254	340	253	285	209	396	*NS*	372	278	301	238	240	287	292

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO103-PZM*			*ug/L*															
1,1,1,2-Tetrachloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	25 U	5 U	25 U	5 U	5 U	5 U	NS	5 U	25 U	25 U	25 U	5 U	5 U	25 U
1,2-Dibromoethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	100 U	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	10.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	10 U	NS	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	50 U	50 U	50 U	25 U	25 U	4.7 J
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	50 U	50 U	50 U	25 U	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	17.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	50 U	50 U	50 U	25 U	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	23.7	29.7	26.7	46.9	75.7	50 U	26.7	50 U	25 U	39.2 J	25 U	NS	25 U	40.1 J	24.5 J	76.1 B	50.6 L2	97.4	24.4 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	0.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	28,900	NS	26,000	67,300	14,000	237,000	48,900	47,300	50,900	54,800	52,000	NS	37,900	24,200	26,500	27,700	10,800	15,800	19,700
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.28 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	3.4 J	5 U	5 U	5 U	5 U	5 U
Chloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	3.8 J
cis-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	1 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	66.7	59.4	62	90.4	29	531	100	80	94.2	88.8	102	NS	78	59.2	53.8	55.5	41.7	31.3	48.7
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	1 U	7.2	5 U	8.5	9.8	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	4.1 JB	5 U	5 U	5 U	5 U	5 U
Naphthalene	NS	9,580	41,200	237,000	1,290	987	36,700	11,000	5,880	10,000	10,500	NS	18,300	3,350	24,900	12,300	7,210	1,970	3,510
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	13.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	30.3	10.9	14.2	33.8	5 U	71	18.9	14.6	16.3	12.5	18.2	NS	16.2	10.9	10.6	10.4	8.1	3.1 J	10.1
Tetrachloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	2,640	3,000	2,310	6,240	1,110	22,000	3,930	3,710	3,920	3,680	3,620	NS	3,190	1,910	2,470	1,980	1,680	1,110	1,890
trans-1,2-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*NS*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Xylenes	1,100	1,060	1,080	1,520	477	4,660	1,630	1,340	1,490	1,430	1,570	*NS*	1,330	926	887	960	769	520	813

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO104-PZM*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	1 U	5 U	1 U	5 U	1 U	1 U	1 U	NS	1 U	5 U	5 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	100 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	NS	5 U	2.7 J	10 U	10 U	29.8 L2M0R1	114	10 U
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	4,610	35.8	93.7	55.1	31.1	23.1	64.2	NS	13.7	0.66 J	8.5	16.5	1 U	5.5	4.1
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	3.8	2.9	1 U	NS	1 U	1.1 B	1 U	1 U	1 U	1 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	0.45 J	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	16.4	3.6	1 U	1 U	0.45 J	0.4 J	0.59 J	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	20.9	101	52.5	42.9	25.8	4.7	23	NS	5.3	2 U	1.8 J	5.5	2 U	2.2	1.1 J
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	0.38 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	5.2	2.6	1 U	1 U	0.2 J	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	1,800	96.5	12.4	6.3	7	2.9	12.4	NS	1.4	1 U	0.45 J	1.1	1 U	1 U	0.27 J
trans-1,2-Dichloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	254	68	10.7	3.3	6	3.4	8.5	*NS*	*1 U*	*3 U*	*3 U*	*3 U*	*1 U*	*1 U*	*3 U*

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO30-PZM015*			*ug/L*															
1,1,1,2-Tetrachloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,1,1-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,1,2-Trichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,1-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,1-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	25 U	5 U	25 U	1 U	5 U	5 U	5 U	5 U	25 U	25 U	25 U	NS	5 U	25 U
1,2-Dibromoethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,2-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,2-Dichloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,2-Dichloropropane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
1,4-Dioxane	100 U	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	15 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	10 U	NS	25 U	25 U	25 U	50 U	25 U	50 U	5 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	NS	25 U	50 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	5 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	NS	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	21.6 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	10 U	25 U	25 U	25 U	25 U	50 U	25 U	50 U	5 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	NS	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	10 U	25 U	25 U	28.3	26.3	50 U	86.2	50 U	5 U	25 U	25 U	25 U	25 U	26.5 J	50 U	46.2 JB	NS	159	50 U
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	76,700	NS	71,400	73,700	75,300	83,400	73,700	79,500	67,900	62,600	82,800	89,800	71,600	66,200	77,400	52,800	NS	88,400	67,500
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.28 JH21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Bromoform	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Bromomethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7.8	5 U	5 U	5 U	5 U	5 U	26.8	5 U	NS	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.46 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Carbon tetrachloride	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Chlorobenzene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Chloroethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Chloroform	1 U	5 U	5 U	5 U	5 U	5 U	11 L1BC9	5 U	1 U	5 U	5 U	5 U	5 U	9.3	5 U	5 U	NS	5 U	5 U
Chloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
cis-1,2-Dichloroethene	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	1 U	3.6 J	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	6
cis-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Dibromochloromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Dichlorodifluoromethane	1 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	101	95.5	120	81.5	101	94.4	117	96.8	107	85.4	115	124	101 IS	100	88.9	71.3	NS	118	102
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Methylene Chloride	1 U	8.3	5 U	6.1	5.9	5 U	7 B	5 U	1 B	3 J	5 U	5 U	5 U	4.3 JB	5 U	5 U	NS	5 U	5 U
Naphthalene	NS	1,770	28,900	8,750	31,100	2,130	12,600	7,050	3,320	1,690	12,100	7,400	19,500	2,720	2,310	1,830	NS	3,560	3,440
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	10.8 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	2 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	43.9	23.8	28.1	30.6	5 U	23.8	25.7	24.4	25.2	18.9	23.6	24.7	19.3 IS	18.1	17.2	10.9	NS	18.3	15.5
Tetrachloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Toluene	5,510	4,680	4,940	4,910	5,560	5,260	6,440	5,650	4,930	4,220	5,820	5,950	4,850	4,470	5,010	3,620	NS	5,860	4,720
trans-1,2-Dichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
trans-1,3-Dichloropropene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Trichloroethene	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	2 J	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U
Trichlorofluoromethane	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*1 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*NS*	*5 U*	*5 U*
Xylenes	2,600	1,430	1,750	1,230	1,510	1,530	1,710	1,420	1,630	1,260	1,620	1,780	1,440 ES	1,360	1,270	1,060	*NS*	1,620	1,440

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO30-PZM060*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	NS	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	100 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	0.69 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	NS	5 U	10 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	NS	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	0.2 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	NS	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	3.4 J	10 U	10 U	NS	58.8	10 U
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	1,050	21	11.8	10.8	15.3	1.5	2.4	28.4	40.7	20	7.2	1 U	NS	5.2	8.1
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Bromoform	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Bromomethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Chloroethane	NS	NS	NS	NS	1 U	1 U	2.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Chloroform	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Chloromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1.3
cis-1,2-Dichloroethene	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	3.3	3.1	1 U	1 U	0.31 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Naphthalene	NS	NS	NS	NS	12	72.4	2.5	5.3	2.9	2 U	3.5	2 U	2 U	2 U	2 U	2 U	NS	2 J	2 U
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	0.27 J1c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	2	3.6	1 U	1 U	0.17 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Tetrachloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Toluene	NS	NS	NS	NS	234	70.8	3.7	1.7	3.7	1 U	0.61 J	1 U	1 U	1 U	1 U	1 U	NS	1.2	1 U
trans-1,2-Dichloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Trichloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	0.23 J	0.25 J	*1 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	50.2	55.7	1.8	*3 U*	3.3	*1 U*	*1 U*	*1 U*	*1 U*	*3 U*	*3 U*	*3 U*	*NS*	*1 U*	*3 U*

U: Non-Detect, *NS: Not Sampled*

Coke Oven Historical Data - Cell 5 Groundwater Analytical Results

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	CO23-PZM008			ug/L															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	25 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	41.1 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	NS	25 U	25 U	5 U	NS	25 U	NS	NS	NS	NS	25 U	50 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	NS	25 U	25 U	5 U	NS	25 U	NS	NS	NS	NS	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	43.2 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	NS	25 U	25 U	5 U	NS	25 U	NS	NS	NS	NS	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Acetone	NS	NS	NS	NS	108	50 U	25 U	NS	25 U	25 U	5 U	NS	25 U	NS	NS	NS	NS	67.7	19.3 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	0.32 JH21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	1,380	991	947	NS	531	428	727	NS	636	NS	NS	NS	NS	564	657
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1.5 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1.1	NS	5 U	NS	NS	NS	NS	5 U	5 U
Chloroethane	NS	NS	NS	NS	5 U	5 U	9.2	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Chloroform	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	38.7	42.1	52.3	NS	22.2	17.3	54.4	NS	31.6	NS	NS	NS	NS	23.2	34.2
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Methylene Chloride	NS	NS	NS	NS	11.8	5 U	6	NS	6.6 B	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Naphthalene	NS	NS	NS	NS	39,500	3,110	3,590	NS	1,370	1,210	2,960	NS	9,640	NS	NS	NS	NS	4,260	4,300
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	41.8 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	8.1 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	37.8	46.6	51.5	NS	10.7	9.1	51.8	NS	21.1	NS	NS	NS	NS	19.8	30.2
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	NS	5 U	NS	NS	NS	NS	5 U	5 U
Toluene	NS	NS	NS	NS	501	603	604	NS	276	217	424	NS	413	NS	NS	NS	NS	217	374

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
trans-1,2-Dichloroethene	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*NS*	*5 U*	*5 U*	*1 U*	*NS*	*5 U*	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*
trans-1,3-Dichloropropene	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*NS*	*5 U*	*5 U*	*1 U*	*NS*	*5 U*	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*
Trichloroethene	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*NS*	*5 U*	*5 U*	*1 U*	*NS*	*5 U*	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*
Trichlorofluoromethane	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*NS*	*5 U*	*5 U*	*1 U*	*NS*	*5 U*	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*NS*	*5 U*	*5 U*	*1 U*	*NS*	*5 U*	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	624	809	840	*NS*	383	300	855	*NS*	474	*NS*	*NS*	*NS*	*NS*	373	543

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO24-PZM007*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	1 U	1 U	1 U	NS	1 U	5 U	5 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	100 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	0.53 JH21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	10 U	25 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	3.5 J
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	10 U	25 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	10 U	25 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	28.8	10 U	25 U	10 U	5 U	9 J	5 U	NS	5 U	10.2	5.2 J	35.6	22.7 L2	47.8	23.2
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	2.5 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	452	25.6	5.3	4.9	4.8	5.7	6.2	NS	5.3	7.5	5.2	5	3.7	5.1	4.4
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.68 JH21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	2.5	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	0.27 J
Chloroethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1.4	1 U	1 U	0.84 J
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	5 U	4.1	7.4	7	7.2	8	6.6	NS	5.5	8.6	4.2	4.5	2.8	7.4	4.1
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	7.4	1 U	5.3	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	1,490	3,390	3,030	3,090	2,810	2,830	3,380	NS	3,950	3,300	5,870	5,900 L1	2,130	4,160	2,360
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	22.7 H21c	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	5 U	2.8	5 U	1 U	1.3	1.5	1.2	NS	1 U	1.3	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	8.2	45.8	5 U	4.4	4.2	4.8	4.6	NS	4.1	5.5	2.9	3.4	2.4	3.5	3.7
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	0.49 J
Trichlorofluoromethane	NS	NS	NS	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*5 U*	*1 U*	*5 U*	*1 U*	*1 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	11.1	30.6	16.7	16.6	17	18	15.1	*NS*	12.2	18.1	9.8	10.9	6.7	13	8.5

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO26-PZM007*			*ug/L*															
1,1,1,2-Tetrachloroethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	1 U	NS	NS	NS	1 U	5 U	1 U	5 U	50 U	1 U	1 U	NS	1 U	5 U	5 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	11.4 U	NS	NS	NS	1 U	NS	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	11.4 U	NS	NS	NS	1 U	NS	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	100 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	28.4 U	NS	NS	NS	NS	NS	NS	NS	0.28 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	11.4 U	NS	NS	NS	NS	NS	NS	NS	0.23 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	49.3	NS	NS	NS	NS	NS	NS	NS	41.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	28.4 U	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	5 U	NS	NS	NS	5 U	10 U	5 U	10 U	125 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	0.87 J
2-Chloronaphthalene	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	5 U	NS	NS	NS	5 U	10 U	5 U	10 U	125 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
2-Methylphenol	73.3	NS	NS	NS	NS	NS	NS	NS	31.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitroaniline	28.4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	28.4 U	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloroaniline	11.4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	5 U	NS	NS	NS	5 U	10 U	5 U	10 U	125 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
4-Nitroaniline	28.4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrophenol	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	5 U	NS	NS	NS	5 U	10 U	5 U	10 U	625 U	5 U	5 U	NS	5 U	3.1 J	10 U	10 U	5 U	38.7	5.3 J

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Benz[a]anthracene	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	449	NS	NS	NS	197	2,120	1 U	1 U	406	231	129	NS	365	288	324	410	1 U	351	366
bis(2-chloroethoxy)methane	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	50 U	2.7	1 U	NS	3.8	1 U	1 U	1 U	1 U	1 U	1 U
Butylbenzylphthalate	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	133	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	50 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	0.3 J	0.18 J	0.21 J	1 U	1 U	1 U	1 U
Chloroethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	NS	NS	NS	1 U	NS	1 U	1 U	25 U	0.43 J	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	18.5	NS	NS	NS	1 U	15.1	1 U	1 U	14.2 J	8.9	5.2	NS	16	10.6	10.1	14.7	1 U	11.3	13.1
Hexachlorobenzene	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	1 U	NS	NS	NS	1 U	NS	1 U	1 U	25 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	89.5	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	46.6	59	6.4	3.8	4,020	1,900	937	NS	2,140	1,940	3,770	6,130 L1	2 U	2,390	3,310
Nitrobenzene	11.4 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-Nitroso-di-n-propylamine	11.4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-Nitrosodiphenylamine	11.4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	28.4 U	NS	NS	NS	NS	NS	NS	NS	1.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	45.6	NS	NS	NS	NS	NS	NS	NS	19.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	38.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	123	NS	NS	NS	2.8	8	1 U	1 U	72.1	45.5	25.5	NS	83.7	56.5	56.9	97.8	1 U	69.5	77.5

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Tetrachloroethene	*1 U*	*NS*	*NS*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*25 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	291	*NS*	*NS*	*NS*	19.9	1,050	*1 U*	*1 U*	262	136	73.7	*NS*	206	163	157	236	*1 U*	202	201
trans-1,2-Dichloroethene	*1 U*	*NS*	*NS*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*25 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
trans-1,3-Dichloropropene	*1 U*	*NS*	*NS*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*25 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Trichloroethene	*1 U*	*NS*	*NS*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*25 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Trichlorofluoromethane	*1 U*	*NS*	*NS*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*25 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Vinyl chloride	*1 U*	*NS*	*NS*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*25 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	409	*NS*	*NS*	*NS*	8	248	*1 U*	*3 U*	312	195	110	*NS*	344	221	220	337	*1 U*	242	281

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO26-PZM032*			*ug/L*															
1,1,1,2-Tetrachloroethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	1 U	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	2.7 U	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	2.7 U	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	5 U	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chloronaphthalene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	5 U	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Methylphenol	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitroaniline	2.7 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	2.7 U	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloroaniline	1.1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	5 U	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitroaniline	2.7 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrophenol	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	5 U	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benz[a]anthracene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-chloroethoxy)methane	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethyl)ether	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	1.1 U	NS	NS	NS	NS	NS	NS	NS	0.21 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	1 U	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butylbenzylphthalate	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	1.1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	1 U	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloromethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobenzene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene Chloride	1 U	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-Nitroso-di-n-propylamine	1.1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-Nitrosodiphenylamine	1.1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	2.7 U	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	1.1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	1 U	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Trichloroethene	*1 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*1 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Trichlorofluoromethane	*1 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*1 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Vinyl chloride	*1 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*1 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Xylenes	*1 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*2 U*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO55-PZM000*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	5 U	NS	1 U	1 U	NS	1 U	5 U	5 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	NS	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	81.5	1.8 J
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	10 U	NS	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	25.6	10 U
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	NS	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
Acetone	NS	NS	NS	NS	54.5	69.4	39.5	10 U	NS	5.9 J	9.4 J	NS	36.1	4 J	11.8	50 MHR1	5 U	372	6 J
Benzene	NS	NS	NS	NS	1,230	835	316	18.1	NS	38.5	15.6	NS	8.2	15.8	7.9	1 U	9.4	11.8	47.5
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1.7	2.5	NS	1 U	0.6 JB	6.1	1 U	1 U	1 U	1 U
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	0.32 J
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 J	NS	1 U	1 U	2.2	1.6	1 U	1 U	1 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1.9
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	11.1	8.8	5 U	1 U	NS	1.6	0.47 J	NS	1 U	0.53 J	0.29 J	1 U	0.23 J	0.53 J	3
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	7.6	6.8	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	569	778	268	77.7	NS	176	31.9	NS	92.2	56	71	2 U	76.7	91.7	331

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Styrene	NS	NS	NS	NS	7.1	7.3	5 U	1 U	NS	1.2	1 U	NS	1 U	0.74 J	1 U	1 U	1 U	1 U	2.3
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	194	395	95.5	10.1	NS	16.3	5.8	NS	4.3	6.9	2.7	0.33 JML	5.9	6	32
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	NS	NS	NS	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	NS	NS	NS	NS	141	161	46.9	7.4	NS	26.4	8.1	NS	6	9.1	3.2	3 U	5.8	8.6	54.7

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO56-PZP001*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	25 U	5 U	5 U	5 U	NS	5 U	25 U	25 U	25 U	1 U	5 U	25 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	38.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	50 U	50 U	50 U	5 U	25 U	50 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	50 U	50 U	50 U	5 U	25 U	50 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	28.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	50 U	50 U	50 U	5 U	25 U	50 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	104	50 U	25 U	50 U	25 U	25 U	25 U	NS	25 U	25.8 J	50 U	50.2	7.6 JL2	109	16.2 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	478	870	515	549	639	359	484	NS	380	391	503	437	345	385	438
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.24 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	0.6 J	5 U	5 U
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Chloroform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	1.5 J	5 U	5 U	0.5 J	5 U	5 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	17.3	18.8	19.4	20.4	21.4	21.1	20.1	NS	15.1	13.4	14.6	14	9.2	14.3	13.8
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Methylene Chloride	NS	NS	NS	NS	11	6.2	6.2	5 U	6.5 B	5 U	5 U	NS	5 U	3.9 JB	5 U	5 U	1 U	5 U	5 U
Naphthalene	NS	NS	NS	NS	30,300	2,500	5,330	8,140	4,390	7,310	8,870	NS	10,800	2,580	32,300	17,900 L1	4,670	3,440	4,130
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	16.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	22.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	47.4	57.6	74.2	81.8	79.7	62.6	75.2	NS	62	61.1	80.4	78.5	36.2	63	85.3
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Toluene	NS	NS	NS	NS	198	404	211	345	360	143	208	NS	176	87.3	136	186	149	103	140
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*NS*	*5 U*	*5 U*	*5 U*	*5 U*	*1 U*	*5 U*	*5 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	328	390	399	401	432	317	405	*NS*	281	256	295	313	196	282	289

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO57-PZP002*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	1 U	5 U	1 U	5 U	1 U	1 U	1 U	NS	1 U	5 U	5 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	100 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	6.9 J	10 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	5 U	10 U	5 U	10 U	5 U	5 U	5.5 JL1	NS	134 M1	4.5 J	10 U	33.8 B	14.9	120	6.4 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	23.9	895	3	1.2	9.7	14.7	23	NS	1 U	1 U	1.3	1 U	1 U	1 U	1 U
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	10.8	1.6	1.7	NS	7.8	5 B	6.3	7.5	2.4	1.1	0.95 J
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	5.7	1 U	3.2	NS	1 U	2	1 U	3	1 U	1.5	3.3
cis-1,2-Dichloroethene	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	0.29 J
cis-1,3-Dichloropropene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	1 U	4.7	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 B	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	8.8	18.6	2 U	2 U	3.3	5.5	2.7	NS	2 U	2 U	2 U	2 U	2 U	4.2	2 U
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	1 U	2.8	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	11.3	349	1.3	1.1	0.88 J	1.5	2.6	NS	1 U	0.24 J	0.33 J	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	0.33 J	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	11.7	79.1	*1 U*	*3 U*	*1 U*	*1 U*	*1 U*	*NS*	*1 U*	*3 U*	*3 U*	*3 U*	*1 U*	*1 U*	*3 U*

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO58-PZM001*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	0.46 J	0.5 J	0.78 J	NS	0.46 J	1 U	0.4 J	0.39 J	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	5 U	1 U	1 U	1 U	NS	1 U	5 U	5 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	16.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5.1 J	10 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	16.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	64.2	50 U	25 U	10 U	5 U	5 U	5 U	NS	5 U	3 J	10 U	19.9	5 U	56.2	3.8 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	265	851	241	220	195	231	270	NS	247	272	276	316	187	256	238
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.22 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	8.2	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	0.37 J	1 U	NS	1 U	0.26 J	1 U	1 U	0.42 J	1 U	0.55 J
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	3.8	1 U	1 U	1 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	13.1	11.8	11.5	11.1	11.2	11.7	14.3	NS	13.8	14.7	11.3	13.4	5.9	12.4	11.8
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.48 JL2	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	9	6	8.1	1 U	1.1 B	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	1,870	1,940	1,900	1,750	1,520	2,290	2,320	NS	3,610	2,490	2,870	3,040 L1	1,420	1,980	2,310
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1.5 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	1.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	30	20	35.9	21.6	24.2	38	43.9	NS	36.7	45.2	38.3	45.1	14.1	38.5	34.3
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	80.4	318	94.7	68.2	56	85.6	108	NS	93.2	138	128	146	63.3	106	93.9
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*1 U*	*1 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	202	220	214	190	182	201	239	*NS*	218	245	199	249	102	213	207

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO59-PZP002*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	5 U	1 U	1 U	1 U	NS	1 U	5 U	5 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	30.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5.9 J	10 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	30.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	NS	5 U	10 U	10 U	10 U	5 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	50.7	50 U	25 U	10 U	5 U	5 U	6.2 JL1	NS	5 U	4.4 J	10 U	19	9.5 JL2	64.5	5.8 J
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	348	97.2	377	106	389	3.6	62.4	NS	9.5	1.2	255	393	1 U	1 U	144
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.24 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	8.7	1 U	1 U	NS	4.2	0.65 JB	5.5	1 U	1 U	1.7	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	1 U	0.43 J	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	0.52 J	1 U	1 U	1 U	0.43 J
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	4.8	1 U	1 U	NS	1 U	1 U	1 U	1	1 U	1.4	1
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	11.2	6	19.3	5.8	20.4	1.3	3.6	NS	0.55 J	1 U	12.2	19.5	1 U	1 U	7.4
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	7.7	5 U	6.8	1 U	1.2 B	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	969	414	1,680	451	1,630	18.6	229	NS	34.7	2	964 H1	4,720 L1	3.3	1.3 J	492
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	13.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	15.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	10.4	5 U	21.2	4.3	19.5	1 U	3	NS	1 U	1 U	7.6	22.8	1 U	1 U	2.1
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	40.5	107	221	62.7	241	3.2	34.1	NS	4.7	0.22 J	122	230	1 U	0.37 J	64.7
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*1 U*	*1 U*	*1 U*	*1 U*	*NS*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	172	89.8	335	92.4	321	12.4	56.4	*NS*	7.4	*3 U*	199	325	*1 U*	2.9 J	116

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Location ID:	*CO60-PZP001*			*ug/L*															
1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	5 U	25 U	5 U	25 U	5 U	5 U	1 U	NS	5 U	25 U	5 U	5 U	1 U	1 U	5 U
1,2-Dibromoethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	NS	NS	NS	NS	500 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	55.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone (MEK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	5 U	NS	25 U	50 U	10 U	10 U	5 U	5.1 J	3.8 J
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	5 U	NS	25 U	50 U	10 U	10 U	5 U	5 U	10 U
2-Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	55.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	25 U	50 U	25 U	50 U	25 U	25 U	5 U	NS	25 U	50 U	10 U	10 U	5 U	5 U	10 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	NS	NS	NS	NS	32.3	76.1	25 U	50 U	25 U	25 U	8.2 JL1	NS	25 U	27.1 J	10 U	23	9.7 JL2	84.9	38.7
Benz[a]anthracene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NS	NS	NS	NS	434	479	361	500	467	186	371	NS	189	189	28.3	151	133	260	310
bis(2-chloroethoxy)methane	NS	NS	NS	NS	NS	NS	NS	NS	2.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

U: Non-Detect, *NS: Not Sampled*

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
bis(2-Chloroethyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	0.26 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	3.1 JB	5.5	3	1 U	1 U	1 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	0.26 J	0.56 J	0.61 J
Chloroethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	2.6 J	0.49 J	1.7	1.8	1 U	0.32 J
Chloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1.8	1 U	1.1	1 U
cis-1,2-Dichloroethene	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	0.32 J
cis-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-ocytlphthalate	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	NS	NS	NS	NS	12.8	13.1	13.1	11.5	14.3	8.5	14.1	NS	6.1	5.6	0.79 J	3.7	2.4	7.1	8.7
Hexachlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.4 J	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	5 U	NS	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NS	NS	NS	NS	7.4	7.8	6.3	5 U	6.8 B	5 U	1 U	NS	5 U	4.3 JB	1 U	1 U	1 U	1 U	1 U
Naphthalene	NS	NS	NS	NS	1,980	2,800	2,350	7,640	2,420	1,050	2,180	NS	892	1,010	198	676	373	1000	2,020
Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	NS	NS	NS	NS	NS	NS	NS	NS	2.6 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	NS	NS	NS	NS	NS	NS	NS	NS	21.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine	NS	NS	NS	NS	NS	NS	NS	NS	10.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NS	NS	NS	NS	44.8	44.4	50.2	74.2	47.2	23.1	60.9	NS	16.2	11.1	1.4	16.4	3.4	17.6	45.6
Tetrachloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Toluene	NS	NS	NS	NS	135	195	101	202	228	48.8	69.9	NS	25.8	11.8	2.3	19.3	12.9	33.8	31
trans-1,2-Dichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	0.64 J
Trichlorofluoromethane	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	NS	5 U	5 U	1 U	1 U	1 U	1 U	1 U

U: Non-Detect, NS: Not Sampled

Parameter	6/1/2013	9/1/2013	11/1/2013	3/1/2014	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	3/1/2016	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017
Vinyl chloride	*NS*	*NS*	*NS*	*NS*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*1 U*	*NS*	*5 U*	*5 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Xylenes	*NS*	*NS*	*NS*	*NS*	245	287	280	270	290	153	278	*NS*	123	96.8	16.7	73.9	47.3	140	176

U: Non-Detect, *NS: Not Sampled*