COKE OVEN INTERIM MEASURES
2021 PROGRESS REPORT

TRADEPOINT ATLANTIC
SPARROWS POINT, MARYLAND

Prepared for:

TRADEPOINT ATLANTIC
1600 Sparrows Point Boulevard
Sparrows Point, Maryland 21219

Prepared by:

ARM GROUP LLC
9175 Guilford Road
Suite 310
Columbia, Maryland 21046

ARM Project No. 21010210

Revision 0 – March 17, 2022

Respectfully Submitted,

Guy Davis
Senior Scientist

Douglas Hamilton
Senior Geologist

EXECUTIVE SUMMARY

This Coke Oven Interim Measures 2021 Progress Report for groundwater remediation at the Tradepoint Atlantic property has been prepared by ARM Group LLC (ARM) on behalf of Tradepoint Atlantic. This report presents the operational information for the remediation systems installed as interim measures (IM) and the laboratory analytical data for groundwater samples collected from site monitoring wells through 2021 that are associated with the remediation systems. An updated groundwater monitoring plan was presented in the *Coke Oven Area Monitoring Network Update Letter* (Revision 0 dated January 18, 2021).

CELL 1

Cell 1 interim measures remedial efforts include an air sparge/soil vapor extraction (AS/SVE) system to address shallow zone groundwater impact in the Former Benzol Processing Area. The AS/SVE system was operated intermittently on a Monday-Wednesday-Friday "pulsing" schedule from January through March 2021 to optimize hydrocarbon recovery based on observations of asymptotic recovery rates and continuously from April through December 2021. The Cell 1 AS/SVE system operated for the majority of 2021 (approximately 68% runtime) minus periods of system downtime as a result of required repairs and removed an estimated 318 pounds of hydrocarbons from the shallow groundwater zone during 2021, compared to 885 pounds removed during 2020.

CELL 2

Cell 2 interim measures remedial efforts include an AS/SVE system originally constructed to address shallow zone groundwater impact and a groundwater pump and treat (GWPT) system to address intermediate zone groundwater impact in the former Coal Basin Area. The AS/SVE ceased operation in early 2019 because the horizontal SVE trench is constructed deeper than the very shallow groundwater conditions that have prevailed during the past three years (e.g., the SVE extraction pipe is submerged under the groundwater surface). The Cell 2 GWPT system operated for the majority of 2021 (approximately 82% runtime) minus some periods of system downtime as a result of required repairs and resulted in the recovery of an estimated 4,948 pounds of VOCs from the Cell 2 intermediate groundwater zone, compared to 6,690 pounds removed during 2020.

CELL 3

Cell 3 interim measures remedial efforts include an AS/SVE system to address localized, shallow zone groundwater impact. The AS/SVE system was operated intermittently on a Monday-Wednesday-Friday "pulsing" schedule from January through mid- March 2021 and continuously from mid-March through October 2021 when the system was taken offline to replace the failed SVE blower. The Cell 3 AS/SVE system operated for the majority of 2021 (approximately 62% runtime) and removed an estimated 28.5 pounds of hydrocarbons, compared to 236 pounds

removed during 2020. Sparging and soil vapor extraction was focused on the eastern-third of the 600 foot long AS/SVE line for the entirety of 2021 where vertical profiling indicated that the dissolved-phase VOC impact is shallower and more reasonably controlled with the limits of the remediation system design

CELL 4

Cell 4 interim measures remedial efforts include the use of pneumatic pumps to recover dense non-aqueous phase liquid (DNAPL) from shallow zone groundwater in the Turning Basin side of the former Coke Oven Area. During 2021 the DNAPL recovery system removed an estimated 72 gallons (equivalent to approximately 691 pounds) of DNAPL. The DNAPL recovery pumps are normally operated in months May through October when ambient temperatures are warm enough to allow the highly viscous DNAPL to flow through the recovery system. Colder temperatures congeal the liquids and result in difficult pump operations.

CELL 5

Cell 5 interim measures remedial efforts include the use of a dual-phase extraction (DPE) system to extract VOC-impacted groundwater and soil vapor from shallow zone groundwater in the Turning Basin side of the former Coke Oven Area. The Cell 5 DPE system operated for the majority of 2021 (approximately 74% runtime) and removed an estimated 197 pounds of hydrocarbons during 2021, compared to 379 pounds removed during 2020 and 234 pounds removed during 2019

CELL 6

Cell 6 interim measures remedial efforts include the operation of a light non-aqueous phase liquid (LNAPL) multi-phase extraction (MPE) system in the Former Benzol Processing Area and operation of a pneumatic skimmer pump to recover LNAPL from former reinjection well CO173. During 2021 the MPE system and CO173 skimmer pump removed a combined estimated total of 1,957 gallons (equivalent to approximately 14,341 pounds) of LNAPL, compared to 5,762 gallons (42,224 pounds) of LNAPL during 2020. Since mid-2010 an estimated 29,945 gallons (equivalent to approximately 219,437 pounds) of LNAPL have been removed.

The Cell 6 MPE system is operated during non-winter months May through October (colder temperatures congeal the NAPL causing frequent clogs) and the CO173 skimmer pump is operated almost daily. A majority of the petroleum mass removed during 2021 was a result of the CO173 pumping operations. LNAPL thickness and groundwater elevation gauging data of the Cell 6 extraction well network will continue to be collected on a regular schedule and used to assess LNAPL recovery trends and opportunities for increased recovery rates. While less NAPL was removed in 2021 than in previous years, LNAPL thickness appear to be dependent on groundwater

elevations (lower groundwater elevations result in thicker observed NAPL thickness); 2021 groundwater elevations were higher than observed during 2018 through 2020.

CORRECTIVE MEASURES STUDY

The IM remediation systems will continue to operate while the Corrective Measures Study is being conducted to evaluate remedial alternatives and develop a recommended final remedy for groundwater pursuant to *Coke Point Area Groundwater Corrective Measures Study Work Plan* (Revision 1, January 15, 2021).

TABLE OF CONTENTS

Executive Summary i

1.0 Introduction 1

1.1. Tradepoint Atlantic Site Background 1
1.2. Coke Oven Area 1

2.0 Cell 1 3

2.1. Description 3
2.2. Operations 3
2.3. Monitoring Well Results 4
2.4. Evaluation of Effectiveness 4
2.5. Summary and Recommendations 4

3.0 Cell 2 6

3.1. Description 6

3.1.1. AS/SVE System 6
3.1.2. GWPT System 6
3.2. Operations 7

3.2.1. AS/SVE System 7
3.2.2. GWPT System 7
3.3. Monitoring Well Results 7
3.4. Evaluation of Effectiveness 8
3.5. Summary and Recommendations 9

4.0 Cell 3 10

4.1. Description 10
4.2. Operations 10
4.3. Monitoring Well Results 11
4.4. Evaluation of Effectiveness 12
4.5. Summary and Recommendations 12

5.0 Cell 4 13

5.1 Description 13
5.1. Operations 13
5.2. Summary and Recommendations 13

6.0 Cell 5 14

6.1 Description 14
6.2 Operations 14
6.3 Monitoring Well Results 15
6.4 Evaluation of Effectiveness 15
6.5 Summary and Recommendations 16

7.0 Cell 6 17

7.1 Description 17
7.2 Operations 17
7.3 Evaluation of Effectiveness 18
7.4 Summary and Recommendations 18
8.0 Summary and Conclusions 19
9.0 References 20

TABLES

Table

C1-1 Summary of Operation Cell 1: AS/SVE System in Former Benzol Processing Area
C1-2 Cell 1 VGAC Influent Analytical Results
C1-3 Cell 1 Groundwater Analytical Results
C2-1 Cell 2 Monitoring Well Construction Information
C2-2 Cell 2 Monitoring Well Groundwater Elevations
C2-3 Summary of Operation Cell 2: Groundwater Pump & Treat System in Former Coal Basin Area
C2-4 Cell 2 Groundwater Analytical Results
C3-1 Summary of Operation Cell 3: AS/SVE System in Cove Area
C3-2 Cell 3 VGAC Influent Analytical Results
C3-3 Cell 3 Groundwater Analytical Results
C4-1 Cell 4 DNAPL Occurrence and Recovery
C5-1 Cell 5 Monitoring Well Construction Information
C5-2 Summary of Operation Cell 5: DPE System in Former Coke Oven Area
C5-3 Cell 5 Monitoring Well Groundwater Elevations
C5-4 Cell 5 Groundwater Analytical Results
C6-1 Cell 6 LNAPL Recovery in Former Benzol Processing Area

FIGURES

Figure

1 Tradepoint Atlantic Regional Site View
2 Former Coke Oven Area Interim Measures Cell Locations
C1-1 Former Coke Oven Area Cell 1 System Layout AS/SVE
C1-2 Cumulative Hydrocarbon Recovery Cell 1
C1-3 Total VOCs in Groundwater Cell 1 Shallow Zone
C2-1 Former Coke Oven Area Cell 2 System Layout AS/SVE and GW P&T
C2-2 Cumulative Hydrocarbon Recovery Cell 2
C2-3 Former Coke Oven Area Cell 2 Q1 Groundwater Contours Shallow Zone
C2-4 Former Coke Oven Area Cell 2 Q2 Groundwater Contours Shallow Zone
C2-5 Former Coke Oven Area Cell 2 Q3 Groundwater Contours Shallow Zone
C2-6 Former Coke Oven Area Cell 2 Q4 Groundwater Contours Shallow Zone
C2-7 Former Coke Oven Area Cell 2 Q1 Groundwater Contours Intermediate Zone
C2-8 Former Coke Oven Area Cell 2 Q2 Groundwater Contours Intermediate Zone

C2-9 Former Coke Oven Area Cell 2 Q3 Groundwater Contours Intermediate Zone
C2-10 Former Coke Oven Area Cell 2 Q4 Groundwater Contours Intermediate Zone
C2-11 Former Coke Oven Area Cell 2 Q1 Benzene Concentrations Shallow Zone
C2-12 Former Coke Oven Area Cell 2 Q2 Benzene Concentrations Shallow Zone
C2-13 Former Coke Oven Area Cell 2 Q3 Benzene Concentrations Shallow Zone
C2-14 Former Coke Oven Area Cell 2 Q4 Benzene Concentrations Shallow Zone
C2-15 Former Coke Oven Area Cell 2 Q1 Benzene Concentrations Intermediate Zone
C2-16 Former Coke Oven Area Cell 2 Q2 Benzene Concentrations Intermediate Zone
C2-17 Former Coke Oven Area Cell 2 Q3 Benzene Concentrations Intermediate Zone
C2-18 Former Coke Oven Area Cell 2 Q4 Benzene Concentrations Intermediate Zone
C2-19 Total VOCs in Groundwater Cell 2 Shallow Zone
C2-20 Total VOCs in Groundwater Cell 2 Intermediate Zone
C3-1 Former Coke Oven Area Cell 3 System Layout AS/SVE
C3-2 Cumulative Hydrocarbon Recovery Cell 3
C3-3 Total VOCs in Groundwater Cell 3 Shallow Zone
C4-1 Former Coke Oven Area Cell 4 System Layout DNAPL Recovery
C5-1 Former Coke Oven Area Cell 5 System Layout DPE System
C5-2 Cumulative Hydrocarbon Recovery Cell 5 – DPE System
C5-3 Former Coke Oven Area Cell 5 Q1 Groundwater Elevation Map Shallow Zone
C5-4 Former Coke Oven Area Cell 5 Q2 Groundwater Elevation Map Shallow Zone
C5-5 Former Coke Oven Area Cell 5 Q3 Groundwater Elevation Map Shallow Zone
C5-6 Former Coke Oven Area Cell 5 Q4 Groundwater Elevation Map Shallow Zone
C5-7 Former Coke Oven Area Cell 5 Q1 Naphthalene Concentrations Shallow Zone
C5-8 Former Coke Oven Area Cell 5 Q2 Naphthalene Concentrations Shallow Zone
C5-9 Former Coke Oven Area Cell 5 Q3 Naphthalene Concentrations Shallow Zone
C5-10 Former Coke Oven Area Cell 5 Q4 Naphthalene Concentrations Shallow Zone
C5-11 Total VOCs in Groundwater Cell 5 Reinjection-Area Monitoring Wells
C5-12 Total VOCs in Groundwater Cell 5 Extraction-Area Monitoring Wells
C5-13 Total VOCs in Groundwater Cell 5 Perimeter Monitoring Wells
C6-1 Former Coke Oven Area Cell 6 System Layout MPE System and LNAPL Recovery
C6-2 Cumulative Hydrocarbon Recovery Cell 6
C6-3 Former Coke Oven Area Cell 6 Extraction Wells Q1 2021 Average Product Thickness
C6-4 Former Coke Oven Area Cell 6 Extraction Wells Q2 2021 Average Product Thickness
C6-5 Former Coke Oven Area Cell 6 Extraction Wells Q3 2021 Average Product Thickness
C6-6 Depth to Water vs. LNAPL Thickness Hydrographs

APPENDICES

Appendix A 2021 Laboratory Analytical Reports.....Following Text
Appendix B 2021 Groundwater Sampling Purge Logs .....Following Text
Appendix C System Operations/Shut-Down Summary .....Following Text
Appendix D Historical Data Summary.....Following Text

1.0 INTRODUCTION

This Coke Oven Interim Measures 2021 Progress Report for groundwater remediation at the Tradepoint Atlantic (TPA) property has been prepared by ARM Group LLC (ARM) on behalf of TPA. This report presents the operational information for the remediation systems installed as interim measures (IM) and the laboratory analytical data for groundwater samples collected from site monitoring wells through 2021 that are associated with the remediation systems. This report also summarizes IM remediation system performance and is submitted in accordance with reporting requirements outlined in correspondence received from the United States Environmental Protection Agency (USEPA) on March 26, 2013, November 14 and 16, 2017, and subsequent communications.

1.1. TRADEPOINT ATLANTIC SITE BACKGROUND

The TPA property is located in Baltimore County, Maryland at the southeastern corner of the Baltimore metropolitan area, approximately nine miles from downtown Baltimore City. The location of the property is presented on **Figure 1.** The property encompasses approximately 3,100 acres located on a peninsula situated on the Patapsco River near its confluence with the Chesapeake Bay.

From the late 1800s until 2012 the property was used for the production and manufacturing of steel, and was the world's largest steel mill by the mid-1900s. Site operations and manufacturing processes included coke, sinter, iron, steel, and semi-finished and finished product production and preparation, and raw material handling. 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. Under TPA revitalization plans, the property is undergoing transformation with demolition of former production parcels, and redevelopment as a regional, light industrial, warehousing and distribution commerce center.

1.2. COKE OVEN AREA

The IM remediation systems currently in operation in the COA are located within six smaller areas designated as Cells 1, 2, 3, 4, 5, and 6. Below is a list of the cells, the name of the area they cover, and the active IM remediation system(s) currently in place:

- Cell 1 (former Benzol Processing Area): Air Sparge/Soil Vapor Extraction (AS/SVE) system operated in the shallow groundwater zone;
- Cell 2 (former Coal Basin Area): Groundwater Pump and Treat (GWPT) system operated in the intermediate groundwater zone;
- Cell 3 (Cove Area): AS/SVE system operated in the shallow groundwater zone;
- Cell 4 (Turning Basin side of former Coke Oven Area): Dense Non-Aqueous Phase Liquid (DNAPL) recovery system operated in the shallow groundwater zone;

- Cell 5 (Turning Basin side of former Coke Oven Area): Dual-Phase Extraction (DPE) system; and
- Cell 6 (former Benzol Processing Area): Multi-Phase Extraction (MPE) system and a skimmer pump operated to recover Light Non-Aqueous Phase Liquid (LNAPL) from well CO173.

The locations of the cells are presented on **Figure 2.** For each cell, this IM progress report provides a brief description of the active IM remediation systems, notable operations & maintenance (O&M) activities performed during 2021, discussion of system operational information, and groundwater sample laboratory analytical results for 2021.

2.0 CELL 1

2.1. DESCRIPTION

The Cell 1 IM consists of an AS/SVE system designed to remove dissolved-phase volatile organic compounds (VOCs) from shallow groundwater with treatment of the extracted soil vapor by vapor-phase granular activated carbon (VGAC). The AS system consists of a rotary vane air compressor that delivers manually-controlled compressed air to 25 sparge wells via an above-ground network of HDPE piping. VOCs stripped from the groundwater and emitted into the vadose zone are removed under vacuum supplied by the SVE system's regenerative blower. The SVE system vacuum is distributed through a SVE trench system with a HDPE extraction pipe that surrounds and transects the sparge well network with connections to the underground SVE trench made by 15 risers that extend above grade. Extracted soil vapor is processed through media filters equipped with VGAC. **Figure C1-1** presents the layout of the Cell 1 AS/SVE system.

2.2. OPERATIONS

Operational performance of the AS/SVE system during 2021 is summarized in **Table C1-1**. The system was operated intermittently on a Monday-Wednesday-Friday "pulsing" schedule from January through March and continuously from April through December. Upon review of 4Q20 and 1Q21 operating data, continuous operation methods were used to enhance remedial effectiveness, and showed continuous operation resulted in similar or better recovery rates with reduced efforts. From April through September 2021, AS/SVE system operations were alternated about monthly between the northern and southern halves of the AS/SVE well network. From late-September through late-November 2021, the system was operated solely in the northern half of the AS/SVE well network. The change in operation was to focus AS/SVE energy on the area that is downgradient from (southwest of) the Cell 6 reinjection wells. After Cell 6 remedial efforts and reinjections were ceased by late-November 2021, Cell 1 AS/SVE operations were again alternated between the northern and southern halves on a monthly schedule. During 2021 the Cell 1 AS/SVE system operated for approximately 68% of the year (5,946 hours) with minor periods of system downtime. Downtime was a result of the initial pulsing operations used through March 2021, power losses, and repairs/preventative maintenance including a 30-day period to replace a failed motor. A very minor period of system downtime occurred in July 2021 with the replacement of SVE piping components. The average hydrocarbon recovery rate during 2021 was approximately 0.076 pound per operating hour. Quarterly recovery rates ranged from approximately 0.004 pound per hour during 4Q21 to approximately 0.142 pound per hour during 1Q21. The decrease in recovery rate is a function of decreasing VOC concentrations in the extracted soil vapor. Although the VOC concentrations decreased during the year, the largest mass recovered occurred in 2Q21 and 3Q21 when the AS/SVE system was operated continuously (24/7), rather than on the day-on/day-off manner used in early-2021. **Table C1-1** also includes the cumulative summary of operational performance since system start-up in August 2012. The Cell 1 AS/SVE system has

recovered an estimated 16,498 pounds of hydrocarbons since system start-up; **Figure C1-2** presents the cumulative recovery graph for the Cell 1 AS/SVE system.

Influent vapor sample laboratory analytical results are presented in **Table C1-2.** Copies of the laboratory reports of analysis are included in **Appendix A.**

2.3. MONITORING WELL RESULTS

Groundwater samples were collected from two monitoring wells on a quarterly schedule, and from a third monitoring well on an annual schedule to monitor dissolved-phase VOC concentrations. **Figure C1-1** presents the monitoring well locations. The monitoring wells sampled are:

- CO93-PZM (former BP-MW-09, upgradient/east of Cell 1, sampled quarterly),
- CO190-MWS (center of northern half of Cell 1, sampled quarterly), and
- CO191-MWS (downgradient/west of Cell 1, sampled once).

The groundwater samples were submitted to Pace Analytical Services, Inc. for laboratory analysis of benzene, toluene, ethylbenzene, and total xylenes (total BTEX) + naphthalene per EPA Method 8260. Groundwater sample laboratory analytical results are presented in **Table C1-3.** A time-series graph of total VOC concentrations is included as **Figure C1-3.** Copies of the laboratory reports of analysis are provided in **Appendix A,** and monitoring well sampling purge logs are included in **Appendix B**. Historical laboratory analytical results for all Cell 1 monitoring wells are included in **Appendix D**.

2.4. EVALUATION OF EFFECTIVENESS

Based on the system recovery data from 2021 and as shown on **Figure C1-2**, the Cell 1 AS/SVE system continues to recover hydrocarbons from the subsurface, and removed an estimated 318 pounds of hydrocarbons in 2021, compared to 885 pounds removed in 2020, and 1,326 pounds in 2019. Recovery in 2019 and 2020 was largely a result of system component repairs made in 2019 that had previously limited recovery rates up to the time of the system upgrades (e.g., repairs to leaking pipes, use of higher pressures, etc.). A calendar with Cell 1 operational days during each month of 2021 is included in **Appendix C**. Although hydrocarbon recovery continues, dissolved VOC concentrations in local shallow zone groundwater have not changed appreciably since early-2017 (**Figure C1-3**).

2.5. SUMMARY AND RECOMMENDATIONS

The Cell 1 AS/SVE system was operated intermittently on an every other day "pulsing" schedule through March 2021, and continuously from April through December 2021, removing an estimated 318 pounds of VOCs. Cell 1 AS/SVE will continue to be operated continuously while being alternated between the northern and southern portions of the site to maximize VOC recovery. The

ongoing removal of the benzene containing NAPL at Cell 6 will reduce the migration of benzene into Cell 1.

3.0 CELL 2

3.1. DESCRIPTION

The Cell 2 IM consists of a GWPT system for the extraction of VOC-impacted groundwater from the intermediate zone. The system began operation in October 2014. Previously, Cell 2 IM remediation efforts included the operation of an AS/SVE system designed to address shallow zone VOC impacts. The AS/SVE system ceased operation in early 2019 and has not operated since because the horizontal SVE trench is constructed deeper than the very shallow groundwater conditions that have prevailed during the past few years (e.g., the SVE extraction piping is submerged under the groundwater surface). **Figure C2-1** presents the system layout of Cell 2 including locations of intermediate zone groundwater extraction wells, shallow zone groundwater reinjection wells, formerly used shallow zone AS wells and SVE trench, and groundwater monitoring well locations.

3.1.1. AS/SVE System

The AS/SVE system was designed to address VOC-impacted groundwater in the shallow zone. The system used conventional, vertically-constructed AS wells connected to an oil-less, rotary vane compressor, and a 500-foot long, horizontally-constructed SVE trench. Extracted soil vapors were treated through a Catalytic Oxidizer (CatOx) and later through VGAC vessels. The SVE trench has been fully submerged by very shallow groundwater conditions since early 2019 and cannot be used to extract soil vapor from the vadose zone under the current site conditions.

3.1.2. GWPT System

The intermediate zone GWPT system includes the following:

- Six 6-inch diameter extraction wells installed approximately 83 feet apart along a 500 feet long line.
- Each extraction well is screened from approximately 35 to 50 feet below ground surface (bgs) with 0.020” slotted screen.
- Each extraction well contains a submersible pump with the pump intake set approximately 5 to 8 feet above the bottom of the well.
- Six 6-inch diameter reinjection wells installed between 50 and 65 feet apart along a 260-foot long line located about 350 feet hydraulically upgradient from the extraction wells.
- Each reinjection well is screened in the shallow zone from approximately 10 to 20 feet bgs with a 5-foot sump from 20 to 25 feet bgs to promote capture of fine-grained sediment.
- Extracted groundwater is temporarily stored in an equalization tank prior to being transferred by an automated, end-suction, centrifugal pump into a low-profile, stacked-tray air stripper operated with a 600 cubic feet per minute (cfm) blower.

- Air stripper off-gas is treated by a 600 cfm capacity CatOx.
- Groundwater processed through the air stripper is transferred into a second equalization tank for temporary storage prior to being discharged to the six reinjection wells by an automated, end-suction, centrifugal pump.

3.2. OPERATIONS

3.2.1. AS/SVE System

The AS/SVE system has not been operated since early 2019 because the SVE trench is submerged by very shallow groundwater. The local groundwater conditions will continue to be monitored to determine if AS/SVE system operation can resume.

3.2.2. GWPT System

The GWPT system was operated throughout 2021 with minor periods of downtime when the system was taken offline to perform minor repairs or to clean the air stripper. During 2021 the GWPT system operated for approximately 82% of the year (7,196 hours) and extracted and treated approximately 2.5 million gallons of dissolved-phase VOC-impacted groundwater from extraction wells CO46-PZM047 (EW-4) and CO47-PZM046 (EW-5), located in the center of the dissolved-phase plume, resulting in the recovery of an estimated 4,948 pounds of hydrocarbons (compared to 2.9 million gallons treated and 6,690 pounds recovered during 2020 [**Table C2-3]**). Refer to **Figure C2-1** for the locations of extraction wells. The cumulative hydrocarbon recovery mass since the GWPT system start-up is presented graphically on **Figure C2-2**, and a consistent recovery rate has been maintained since early 2019. Extraction wells EW-4 and EW-5 contain the highest VOC concentrations of the available extraction wells, and full-production from the two wells optimizes system efficiency and recovery. Extraction wells EW-4 and EW-5 were pumped simultaneously from January to early-August 2021, and only EW-5 was pumped thereafter through the end of 2021. Extraction well EW-4 operations stopped in August due to a failed submersible pump.

3.3. MONITORING WELL RESULTS

Groundwater samples were collected from the monitoring wells listed below to monitor the dissolved-phase VOC concentrations in the shallow and intermediate groundwater zones underlying Cell 2.

Shallow Zone:	Intermediate Zone:
CO27-PZM012 (center of plume)	CO27-PZM046 (center of plume)
CO28-PZM010 (sidegradient of Cell 2)	CO28-PZM048 (sidegradient of Cell 2)
CO36-PZM008 (sidegradient of Cell 2)	CO36-PZM043 (sidegradient of Cell 2)
CO37-PZM003 (sidegradient of Cell 2)	CO37-PZM038 (sidegradient of Cell 2)
CO38-PZM006 (upgradient of Cell 2)	CO38-PZM043 (upgradient of Cell 2)

CO39-PZM007 (upgradient of Cell 2)
CO40-PZM008 (upgradient of Cell 2)
CO41-PZM001 (upgradient of Cell 2)
CO42-PZM004 (sidegradient of Cell 2)
CO179-MWS (downgradient of Cell 2)
CO180-MWS (sidegradient of Cell 2)
CO181-MWS (sidegradient of Cell 2)
CO186-MWS (upgradient of Cell 2)
CO209-MWS (sidegradient of Cell 2)
CO39-PZM042 (upgradient of Cell 2)
CO41-PZM036 (upgradient of Cell 2)
CO180-MWI (sidegradient of Cell 2)
CO181-MWI (sidegradient of Cell 2)
CO182-MWI (upgradient of Cell 2)
CO209-MWI (sidegradient of Cell 2)
GD01-MWI (downgradient of Cell 2)
GD02-MWI (downgradient of Cell 2)

Figure C2-1 presents the monitoring well locations. Groundwater gauging data and groundwater elevations are summarized in **Table C2-2. Figures C2-3** through **C2-6** and **Figures C2-7** through **C2-10** provide groundwater elevation contour maps for each quarter within the shallow and intermediate groundwater zones, respectively.

Quarterly groundwater samples were submitted to Pace Analytical Services, Inc. for laboratory analysis of total BTEX + naphthalene per EPA Method 8260. **Table C2-4** provides a summary of the groundwater sample laboratory analytical results. **Figures C2-11** through **C2-14** present quarterly benzene concentrations in the shallow zone groundwater monitoring wells. **Figures C2-15** through **C2-18** present quarterly benzene concentrations in the intermediate zone groundwater monitoring wells. A time-series graph of total VOC concentrations in groundwater samples from shallow zone monitoring wells is presented on **Figure C2-19**. Similarly, **Figure C2-20** provides a time-series graph of total VOC concentrations in intermediate zone groundwater samples. Copies of laboratory reports of analysis are included in **Appendix A.** Monitoring well sampling purge logs are included in **Appendix B**. Historical laboratory analytical results for all Cell 2 monitoring wells are included in **Appendix D**.

The groundwater flow direction in the shallow zone, modified by groundwater discharged into the reinjection wells, is towards the west-northwest as presented on **Figures C2-3** through **C2-6.** As presented on **Figures C2-7** through **C2-10**, the groundwater flow direction in the intermediate zone is to the north (towards the groundwater extraction wells) with up to 3 feet of gradient between extraction well locations and upgradient wells

3.4. EVALUATION OF EFFECTIVENESS

Based on the system recovery data from 2021 the Cell 2 GWPT system continues to extract VOC-impacted groundwater from the intermediate zone. The GWPT system removed an estimated 4,948 pounds of hydrocarbons during 2021, compared to 6,690 pounds during 2020. The AS/SVE system remained offline during 2021. A calendar with Cell 2 operational days during each month of 2021 is included in **Appendix C**.

As shown on **Figure C2-19**, VOC concentrations in some shallow zone groundwater monitoring wells are noted to be decreasing with a decrease of two orders of magnitude in CO42-PZM004,

located sidegradient of the extraction well network. VOC concentrations in monitoring wells CO27-PZM012, CO38-PZM006 and CO40-PZM008, located within or upgradient of the extraction well network, have shown minor, long-term reductions. Since late-2020, VOC concentrations in monitoring wells CO36-PZM008, CO39-PZM007, CO41-PZM001 and CO42-PZM004 are increasing. During 2021, groundwater elevations in the shallow zone wells were slightly lower than those observed during 2020.

As presented on **Figure C2-20**, VOC concentrations are notably decreasing in intermediate zone monitoring wells CO27-PZM046 and CO38-PZM043, located within the extraction well network and hydraulically upgradient of the extraction well network, respectively. Since August 2020, VOC concentrations in monitoring well CO39-PZM042, also located upgradient from the extraction well network, have increased by an order of magnitude. VOC concentrations in upgradient monitoring well CO182-MWI, upgradient monitoring well CO41-PZM036, sidegradient monitoring well CO37-PZM038, and sidegradient monitoring well CO36-PZM043 have remained mostly unchanged since at least mid-2019.

3.5. SUMMARY AND RECOMMENDATIONS

Cell 2, located in the Former Coal Basin Area of the Site, includes a GWPT system for the extraction of VOC-impacted groundwater from the intermediate zone.

The groundwater recovery/treatment and VOC mass recovery rates have been maintained relatively consistently since early 2019. Redevelopment of the two extraction wells was completed in late 2021 to increase well yields and the defoaming chemical used to control foaming in the air stripper was changed from a silicone-based to a water-based defoamer at the end of 2021. These system upgrades should provide for higher-than-average recovery rates and system downtime for air stripper cleaning events during 2022.

4.0 CELL 3

4.1. DESCRIPTION

The Cell 3 IM consists of an AS/SVE system to remove dissolved-phase VOCs from groundwater with treatment of the extracted soil vapor by VGAC. The AS system consists of a rotary vane air compressor that delivers compressed air to fourteen vertical sparge wells via aboveground HDPE piping and individually-valved, swingarm hoses connected to each sparge well. The SVE system consists of a regenerative vacuum blower operating on up to five HDPE pipe risers that connect (tee) to a horizontally buried SVE extraction pipe within a 600 foot long shallow extraction trench. There are no valves on the subsurface SVE piping to isolate and focus SVE energy on specific or selected sections of the trench. As such, SVE energy can only be proportionally-controlled by operating the aboveground valve on each SVE riser pipe. **Figure C3-1** presents the layout of the Cell 3 AS/SVE system and the locations of the major system components including AS and SVE wells, the SVE trench, and groundwater monitoring wells. The major AS/SVE system 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* (URS 2011).

4.2. OPERATIONS

Operational data for the AS/SVE system during 2021 is summarized in **Table C3-1**. The system was operated intermittently on a Monday-Wednesday-Friday "pulsing" schedule through mid-March and continuously from mid-March through the end of October when the SVE blower motor failed. A replacement unit has been procured and will be installed during the first quarter of 2022. The change from pulsing to continuous operation was made after review of fourth quarter 2020 and first quarter 2021 recovery data showed diminishing returns. Continuous operation increased operating times by a factor of four, but extracted soil vapor VOC concentrations diminished substantially as well. The result was much lower recovery rates in the second through fourth quarters compared to the first quarter. During 2021 the Cell 3 AS/SVE system operated for approximately 62% of the year (5,462 hours) with some downtime. System downtime occurred because of power loss, minor repairs and preventative maintenance, and the initial pulsed operation during the first quarter of 2021. The majority of 2021 downtime occurred when the system was taken offline for November and December to replace the failed SVE blower motor. During 2021 the Cell 3 AS/SVE system removed an estimated 28.5 pounds of VOCs. A cumulative total of approximately 2,229 pounds of VOCs have been removed to date, and is presented graphically on **Figure C3-2**.

SVE influent (e.g., pre-treatment) vapor samples were collected monthly to assess recovery rates. The monthly SVE samples were submitted to Maryland Spectral Services for laboratory analysis of VOCs + naphthalene per EPA Method 8260. SVE vapor sample laboratory analytical results

are presented in **Table C3-2.** Copies of the laboratory reports of analysis are included in **Appendix A.**

4.3. MONITORING WELL RESULTS

Groundwater samples were collected from six monitoring wells on a quarterly schedule and once from a seventh monitoring well. **Figure C3-1** presents the monitoring well locations. Groundwater samples were collected from the following monitoring wells:

- CO30-PZM015 (downgradient of Cell 3),
- CO30-PZM060 (downgradient of Cell 3),
- CO194-MWS (upgradient of Cell 3),
- CO195-MWS (upgradient of Cell 3),
- CO196-MWS (upgradient of Cell 3),
- CO198-MWS (downgradient of Cell 3), and
- CO201-MWS (downgradient of Cell 3).

Groundwater samples were submitted to Pace Analytical Services, Inc. for laboratory analysis of total BTEX + naphthalene per EPA Method 8260. Groundwater sample laboratory analytical results are presented in **Table C3-3**. A VOC concentration time-series graph is included as **Figure C3-3.** Copies of the laboratory reports of analysis are included in **Appendix A**. Monitoring well sampling purge logs are included in **Appendix B**. Historical laboratory analytical results for all Cell 3 monitoring wells are included in **Appendix D**.

Groundwater sample laboratory analytical results indicate that benzene and naphthalene are the two most prevalent VOC constituents in local shallow zone groundwater. VOC concentrations in monitoring well CO30-PZM015 had shown relatively stable concentrations through mid-2021, but much lower concentration in the groundwater sample collected during September 2021, followed by more normal concentrations in the groundwater sample collected during December 2021. VOC concentrations in monitoring well CO196-MWS are decreasing since October 2019, while VOC concentrations in monitoring wells CO194-MWS and CO198-MWS have shown limited change since October 2019. VOC concentrations in monitoring wells CO201-MWS and CO30-PZM060 have been increasing since at least mid-2020.

Vertical profiling of VOC concentrations in the shallow zone groundwater was conducted during previous investigations and indicated that the majority of the benzene mass beneath Cell 3 is located from 15 to 30 feet bgs and the majority of the naphthalene mass is located from 20 to 40 feet bgs (ARM 2019). The current AS wells are screened just into the uppermost portion of the benzene-impacted zone (i.e., about 17 feet deep) and current remedial efforts are limited by the screen intervals not fully penetrating into the center of the vertical distribution of benzene and naphthalene.

4.4. EVALUATION OF EFFECTIVENESS

Based on the system monitoring data from 2021 and as shown on **Figure C3-2** AS/SVE system recovery appears to have leveled off in the current system configuration despite the system being operated at nearly 100% runtime during the second and third quarters of 2021. A calendar with Cell 3 operational days during each month of 2021 is included in **Appendix C**. Remediation system performance at Cell 3 is limited by the screen intervals of the AS wells only penetrating the uppermost portion of the benzene and naphthalene plumes.

4.5. SUMMARY AND RECOMMENDATIONS

The Cell 3 AS/SVE system was operated for approximately 5,462 hours during 2021 and recovered approximately 28.5 pounds of VOCs. VOC concentrations are either stable or increasing in site monitoring wells. During 2022 the Cell 3 AS/SVE system will continue to be operated in the eastern half of the SVE trench line, and pulsed operation will be re-evaluated.

5.0 CELL 4

5.1 DESCRIPTION

The Cell 4 IM consists of a DNAPL recovery system operating in the naphthalene source area. During the latter part of the fourth quarter 2015 pneumatic pumps were installed in wells CO123-PZM, CO124-PZM, and CO125-PZM to recover DNAPL from shallow groundwater. **Figure C4-1** presents the system layout of Cell 4 including the locations of extraction wells used for DNAPL recovery. Extraction well CO123-PZM routinely contains the most DNAPL. The DNAPL recovery pumps are operated during warmer months May through October because of gelling of the DNAPL during cold temperatures. The recovered DNAPL is pumped directly into 55-gallon storage drums staged adjacent to the respective extraction wells. Upon filling, the drums are transported off-site under proper manifest by a licensed transporter and disposed at a certified disposal facility.

5.1. OPERATIONS

Table C4-1 summarizes the volumes and masses of DNAPL recovered from extraction wells CO123-PZM, CO124-PZM, and CO125-PZM during 2021, as well as the cumulative volumes and masses of DNAPL recovered from the Cell 4 naphthalene source area to date. During 2021 the DNAPL recovery system recovered approximately 72 gallons (equivalent to 691 pounds) of DNAPL, compared to 172 gallons (equivalent to 1,651 pounds) of DNAPL recovered during 2020. DNAPL recovery volumes have reduced from 2,208 pounds during 2019 to 1,651 pounds during 2020 to 691 pounds during 2021. The decreasing recovery volumes are more a function of the decrease in mobile DNAPL that can be recovered by the pumps as they were operated at the same frequency during 2021 as they were operated during 2020 and 2019 (approximately once per month during non-winter months).

5.2. SUMMARY AND RECOMMENDATIONS

Cell 4 includes a DNAPL recovery system designed to remove DNAPL from the naphthalene source area within the former Coke Oven Area. The DNAPL recovery system recovered approximately 72 gallons (equivalent to 691 pounds) of DNAPL from the shallow zone groundwater in the Cell 4 naphthalene area during 2021. The feasibility of naphthalene source area removal for Cell 4 is currently being evaluated.

6.0 CELL 5

6.1 DESCRIPTION

The Cell 5 IM consists of a DPE system for the extraction of VOC-impacted groundwater and soil vapor from the shallow zone. The DPE system uses a liquid ring vacuum pump (LRP) to extract VOC-impacted groundwater and soil vapor with treatment of the extracted groundwater performed by a low-profile, stacked tray air stripper with final treatment provided by two 1,000-pound, liquid phase granular activated carbon (LGAC) vessels. Treated system process water is reinjected into upgradient wells..

The extraction well network consists of twelve 1.5-inch diameter extraction wells installed along a 500-foot long line (spaced approximately 42 feet apart) and the reinjection well network consists of six 6-inch diameter reinjection wells located about 590 feet hydraulically upgradient of the extraction well line. The extraction wells are screened from 15 to 17 feet bgs and are reported to be perforated from 10 to 12 bgs for soil vapor recovery. The upgradient reinjection wells are screened from 5 to 15 feet bgs. **Figure C5-1** presents the system layout of Cell 5 including the locations of DPE wells and groundwater reinjection wells.

6.2 OPERATIONS

During 2021 the Cell 5 DPE system operated for approximately 74% of the year (6,476 hours) with a few periods of downtime. The first period of downtime occurred when Cell 5 was taken offline for two and a half weeks in March to change the carbon in the LGAC units, replace cracked and leaking piping and fittings within the system, install a flow meter on the air stripper influent water piping to monitor flowrates to allow for system optimization, remove the VGAC units from off-gas piping, and reconfigure the vapor emission piping. A second period of downtime occurred from August to September 2021 when COVID-related shortages prevented filter media units required for LRP system operation from being delivered in a timely manner. A third period of system downtime occurred in October 2021 over a two-week period in response to two extraction wells being damaged by site grading operations. In December 2021, one of the two LGAC vessels was discovered to have severe corrosion and pitting causing a leak that required the system to be shut down. The same LGAC vessel had been repaired previously for corrosion, and the area of pitting and the size of the holes discovered in December were beyond repair. A replacement LGAC vessel has been ordered and will be placed in service in early-2022.

Table C5-2 presents the quarterly summary and cumulative gallons of groundwater extracted and treated by the DPE system during 2021. Approximately 4.3 million gallons of VOC-impacted groundwater were extracted and treated during 2021, as compared to approximately 8.1 million gallons of groundwater extracted and treated during 2020.

6.3 MONITORING WELL RESULTS

Groundwater samples were collected from nine monitoring wells on a quarterly schedule to monitor the dissolved-phase VOC concentrations in local, shallow zone groundwater. **Figure C5-1** presents the monitoring well locations. Groundwater samples were collected from the following monitoring wells:

- CO23-PZM008 (upgradient of Cell 5)
- CO24-PZM007 (upgradient of Cell 5)
- CO26-PZM007 (downgradient of Cell 5 on eastern perimeter of site)
- CO55-PZM000 (upgradient of extraction well area)
- CO56-PZP001 (upgradient of extraction well area)
- CO57-PZP002 (sidegradient of Cell 5)
- CO58-PZM001 (downgradient of Cell 5 on eastern perimeter of site)
- CO59-PZP002 (upgradient of Cell 5)
- CO60-PZP001 (sidegradient of Cell 5 on eastern perimeter of site)

The groundwater samples were submitted to Pace Analytical Services, Inc. for laboratory analysis of total BTEX + naphthalene per EPA Method 8260. Laboratory analytical reports are included in **Appendix A**. Monitoring well sampling purge logs are included in **Appendix B**. Historical laboratory analytical results for all Cell 5 monitoring wells are included in **Appendix D**.

The groundwater gauging data is summarized in **Table C5-3**. Groundwater sample laboratory analytical data is presented in **Table C5-4. Figures C5-3** through **C5-6** present the corrected groundwater elevations of monitoring wells sampled during each quarter of 2021. Groundwater elevation contour maps are not created for Cell 5 monitoring wells because the groundwater gradient is relatively flat with less than 1 foot of difference across the site. Naphthalene is the most prevalent VOC in the groundwater underlying Cell 5. Quarterly-derived naphthalene concentrations are mapped in **Figures C5-7** through **C5-10.** Time-series graphs of VOC concentrations in local monitoring wells are presented as **Figures C5-11, C5-12** and **C5-13.**

Monitoring wells CO57-PZP002 and CO59-PZP002 were inaccessible due to large rubble piles preventing access to the wells during the first and second quarter 2021, and the first quarter 2021, respectively.

6.4 EVALUATION OF EFFECTIVENESS

During 2021, the DPE system extracted and treated approximately 4.3 million gallons of groundwater resulting in the recovery of approximately 197 pounds of hydrocarbons. Recovery rate data is summarized in **Table C5-2**. The DPE system has recovered a total of approximately 1,962 pounds of hydrocarbons since late-2014, as presented on **Figure C5-2**. A calendar with Cell

5 operational days during each month of 2021 is included in **Appendix C**. VOC concentration trends in the monitoring wells are summarized below:

- CO23-PZM008 – no significant change since December 2019
- CO24-PZM007 – concentrations reducing since October 2019
- CO55-PZM000 – concentrations reducing by two orders of magnitude since September 2014
- CO56-PZM001 – concentrations stable since September 2018
- CO59-PZM002 – concentrations increasing since June 2019
- CO26-PZM007 – concentrations significantly fluctuating but stable since September 2017
- CO58-PZM001 – concentrations fluctuating but stable since December 2018
- CO57-PZP002 – concentrations were decreasing until last sampled in October 2019
- CO60-PZP001 – concentrations stable since December 2019

6.5 SUMMARY AND RECOMMENDATIONS

Cell 5 includes a DPE system designed to address and contain VOC-impacted shallow zone groundwater within the former Coke Oven Area. The DPE system recovered an estimated 197 pounds of hydrocarbons from the shallow zone groundwater underlying the Cell 5 area during 2021. The Cell 5 DPE system operated for approximately 74% of the year. Cell 5 will continue to be operated as an IM until a final remedy is implemented. Naphthalene source area removal evaluations were initiated in late-2021.

7.0 CELL 6

7.1 DESCRIPTION

The Cell 6 Multi-Phase Extraction (MPE) system at the Former Benzol Processing Area began operation in October 2016. The MPE system uses a positive-displacement vacuum pump to extract LNAPL, groundwater, and soil vapor under high vacuum. The extracted vapor and liquid phases are processed through an air/water separator with the liquid fraction pumped to an oil/water separation system, and the air fraction process through a CatOx. The oil/water separation system consists of successive poly tanks equipped with coalescing media that allows recovered LNAPL to be skimmed into petroleum storage tanks. The water fraction gravity drains into a final poly tank for automated pumping through oleophilic filter bags and is reinjected downgradient from Cell 6. Before the semi-automated system began operation in October 2016, remedial activities included manual operation of pneumatic LNAPL skimming pumps and hand bailing of LNAPL starting in July 2010.

A measurable thickness of LNAPL was identified in former reinjection well CO173 in 2019. Since December 2019, CO173 has been equipped with a solar-powered and bottled nitrogen-gas supplied, pneumatic skimmer pump that is manually operated by controlling the flow of nitrogen to the pump in order to recover LNAPL. The pneumatic skimmer pump is operated almost daily Monday through Friday throughout the year and recovered the majority of the LNAPL at Cell 6 during 2021.

The MPE well network consists of fifty-three 2-inch diameter by 17 feet deep extraction wells. The reinjection well network consists of three 6-inch diameter by 20 foot deep wells located west-northwest of Cell 6. The extraction wells are connected to an exterior manifold with above-ground piping and are operated using individually-controlled valves. The locations of the MPE wells, reinjection wells, and system features are presented on **Figure C6-1**. Additional details of the MPE system are listed below.

7.2 OPERATIONS

During 2021 the Cell 6 MPE system recovered an estimated 490 gallons (equivalent to 3,591 pounds) of LNAPL. During 2021, the pneumatic skimmer pump in CO173 recovered approximately 1,467 gallons (equivalent to approximately 10,751 pounds) of LNAPL. The LNAPL recovered by the MPE system is temporarily stored in a 5,000-gallon AST and the LNAPL recovered from CO173 is temporarily stored in a 500-gallon AST. All recovered petroleum products are disposed under manifest by a RCRA-licensed waste hauler and disposal facility.

Table C6-1 summarizes 2021 MPE system and pneumatic skimmer pump LNAPL recovery volumes and cumulative LNAPL recovery by hand bailing and skimmer pump operation before the MPE system began operation in October 2016.

7.3 EVALUATION OF EFFECTIVENESS

As shown in **Table C6-1** and on **Figure C6-2**, the Cell 6 MPE system and the CO173 skimmer pump recovered a combined 1,957 gallons (equivalent to 14,341 pounds) of LNAPL during 2021. The volumes removed in 2019 and 2020 were 5,762 and 2,182 gallons, respectively. **Figures C6-3** through **Figure C6-5** present the average quarterly LNAPL thicknesses measured in the extraction well network through the third quarter of 2021. The wells were not gauged during the fourth quarter 2021 when the system was winterized. As depicted in the hydrographs for select extraction wells CO133, CO134, and CO168 on **Figure C6-6**, LNAPL thicknesses appear to be dependent on groundwater fluctuations – when groundwater levels are lower, LNAPL thicknesses appear to be greater, and vice versa. Further review of **Figure C6-6** shows that 2021 groundwater elevations were several feet higher than observed during early 2018.

7.4 SUMMARY AND RECOMMENDATIONS

Cell 6 IM remediation efforts consist of a MPE system at the Former Benzol Processing Area and a pneumatic skimmer pump operated to recover LNAPL from former reinjection well CO173. The MPE system and CO173 skimmer pump recovered a total of 1,957 gallons of LNAPL during 2021. Since mid-2010 a total of 29,945 gallons of LNAPL were recovered and disposed offsite. The Cell 6 extraction well network will continue to be gauged to monitor LNAPL thicknesses and the gauging data will be used to identify specific extraction wells with thicker accumulations of LNAPL and aid in determining where MPE recovery operations should be focused. LNAPL volumes removed by the CO173 skimmer pump will also continue to be documented.

8.0 SUMMARY AND CONCLUSIONS

During 2021 the former Coke Oven Area IMs were operated in accordance with their respective operating plans and designs. A total of 20,525 pounds of hydrocarbons were removed by the six IM remediation systems during 2021, compared to 50,400 pounds during 2020, 26,560 pounds during 2019, and 18,700 pounds during 2018.

The IMs will continue to operate during Corrective Measures Study (CMS) evaluations of remedial options and the development of recommended longer-term remedies pursuant to *Coke Point Area Groundwater Corrective Measures Study Work Plan* (Revision 1, January 15, 2021). During the CMS evaluation process, NAPL recovery rates and site monitoring data will continue to be evaluated to determine if/when additional measures may be warranted.

9.0 REFERENCES

ARM Group LLC (2021). *Coke Point Area Groundwater Corrective Measures Study Work Plan.* Revision 1. January 15, 2021.

ARM Group LLC (2021). *Coke Oven Area Groundwater Monitoring Update Letter.* Revision 0. January 18, 2021.

ARM Group LLC (2021). *Coke Oven Interim Measures 2020 Progress Report,* Revision 0. February 19, 2021.

Key Environmental (2015). *Pre-Design Investigation (PDI) Summary Report – Former Coke Oven Area.* October 9, 2015.

URS Corporation. (2011). *Coke Oven Area Interim Measures Cell 3 "Cove" Area Air Sparge/Soil Vapor Extraction System Design*). March 1, 2011.

TABLES

TABLES

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

Cell 1 2021 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	377	365	351	368	365
Average Concentrations	ug/L	101	59	58	3	55
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.142	0.080	0.076	0.004	0.076
Total VGAC Operating Time	hours	184	1,980	1,648	2,134	5,946
Overall VGAC Operational Time	%	8.5%	90.7%	74.6%	96.6%	67.6%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	26.2	159	126	7.7	318

NS = Not Sampled

Cell 1 Cumulative Summary of Estimated Hydrocarbon Recovery

August 3, 2010 - December 31, 2021

Parameter	Units	Quantity
Total VGAC Operating Time	hours	49,351
Overall VGAC Operational Time	%	49.3%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	16,498
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.3343

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

Month		January	February	March	April	May	June	July	August	September	October	November	December
Analyte (TO-15 Organics)	**Units**	1/22/2021	2/10/2021	3/5/2021	4/14/2021	5/14/2021	6/10/2021	7/15/2021	8/4/2021	9/1/2021	10/4/2021	11/2/2021	12/1/2021
Acetone	ug/L	*ND*	*ND*	*ND*	**3.23**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
tert-Amyl alcohol (TAA)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
tert-Amyl ethyl ether (TAEE)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
tert-Amyl methyl ether (TAME)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Benzene	ug/L	**98.2**	**90.6**	**107**	**35.9**	**3.65**	**128**	**156**	**0.25**	**6.07**	**2.21**	**3.05**	**1.04**
Bromobenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Bromochloromethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Bromodichloromethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Bromoform	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Bromomethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
tert-Butanol (TBA)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
2-Butanone (MEK)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
n-Butylbenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
sec-Butylbenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
tert-Butylbenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Carbon disulfide	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Carbon tetrachloride	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Chlorobenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Chloroethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Chloroform	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Chloromethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
2-Chlorotoluene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
4-Chlorotoluene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,2-Dibromo-3-chloropropane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Dibromochloromethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,2-Dibromoethane (EDB)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Dibromomethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,2-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,3-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,4-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Dichlorodifluoromethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,1-Dichloroethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,2-Dichloroethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,1-Dichloroethene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
cis-1,2-Dichloroethene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
trans-1,2-Dichloroethene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Dichlorofluoromethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,2-Dichloropropane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,3-Dichloropropane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
2,2-Dichloropropane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,1-Dichloropropene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
cis-1,3-Dichloropropene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
trans-1,3-Dichloropropene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Diisopropyl ether (DIPE)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Ethyl tert-butyl ether (ETBE)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Ethylbenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Hexachlorobutadiene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
2-Hexanone	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Isopropylbenzene (Cumene)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
4-Isopropyltoluene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Methyl tert-butyl ether (MTBE)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
4-Methyl-2-pentanone	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Methylene chloride	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Naphthalene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
n-Propylbenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Styrene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,1,1,2-Tetrachloroethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,1,2,2-Tetrachloroethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Tetrachloroethene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Toluene	ug/L	**1.69**	**2.28**	**2**	**0.92**	**1.06**	**2.37**	**10.9**	*ND*	**0.28**	**0.11**	**0.1**	**0.47**
1,2,3-Trichlorobenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,2,4-Trichlorobenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,1,1-Trichloroethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,1,2-Trichloroethane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Trichloroethene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Trichlorofluoromethane (Freon 11)	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,2,3-Trichloropropane	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,2,4-Trimethylbenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
1,3,5-Trimethylbenzene	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Vinyl chloride	ug/L	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
o-Xylene	ug/L	*ND*	*ND*	*ND*	*ND*	**0.34**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**0.29**
m- & p-Xylenes	ug/L	*ND*	*ND*	*ND*	*ND*	**0.29**	*ND*	**1.01**	*ND*	**0.11**	**0.13**	*ND*	**0.47**
Total Volatile Organics	ug/L	**100**	**93**	**109**	**40**	**5**	**130**	**168**	**0**	**6**	**2**	**3**	**2**

Notes:
BOLD = Analyte detected
ug/L = micro grams per liter
U = Non-detect
NS = Not Sampled

Table C1-3
Cell 1 Groundwater Analytical Results

Sample ID		CO93-PZM				CO190-MWS				CO191-MWS
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q2
Event Date		3/11/2021	5/25/2021	9/7/2021	12/09/2021	3/11/2021	5/25/2021	9/7/2021	12/09/2021	5/25/2021
Volatile Organic Compound	**Units**									
Benzene	µg/L	**249000**	**181000**	**159000**	**182000**	**155000**	**427000**	**763000**	**299000**	**107000**
Ethylbenzene	µg/L	**641**	**1050**	**1290**	**1410**	**9.5**	**40.6**	**68.6**	**21.1**	**243**
Toluene	µg/L	**73900**	**48200**	**57300**	**59800**	**8510**	**28300**	**54400**	**15900**	**19600**
Xylenes	µg/L	**15000**	**10500**	**16800**	**15100**	**194**	**988**	**1540**	**503**	**2730**
Total Volatile Organics	µg/L	**338,541**	**240,750**	**234,390**	**258,310**	**163,714**	**456,329**	**819,009**	**315,424**	**129,573**
Semi-Volatile Organic Compound	**Units**									
Naphthalene	µg/L	**1,340**	**1,840**	**6,040**	**7,200**	**97**	**74.4**	**315**	**98.1**	**377**

Notes:

Bold = Analyte Detected

µg/L = micrograms per liter

U = Analyte not detected above reporting limit

Table C2-1
Cell 2 Monitoring 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
CO27-PZM012	none	Hollow Stem Auger	563239.965	1454916.917	5.12	Unknown	15.00	5.00	10.00
CO27-PZM046	none	Hollow Stem Auger	563239.958	1454913.372	5.17	Unknown	49.00	39.00	10.00
CO28-PZM010	none	Unknown	562891.927	1454280.619	12.34	Unknown	Unknown	Unknown	Unknown
CO28-PZM048	none	Hollow Stem Auger	562888.758	1454283.654	12.69	Steel Riser	58.00	48.00	10.00
CO36-PZM008	Cell 2 - MW1 (S)	Hollow Stem Auger	563212.310	1454571.760	6.94	Steel Riser	15.00	5.00	10.00
CO36-PZM043	Cell 2 - MW8 (I)	Hollow Stem Auger	563214.490	1454578.370	6.92	Steel Riser	50.00	30.00	20.00
CO37-PZM003	Cell 2 - MW2 (S)	Hollow Stem Auger	563268.520	1455158.690	12.34	Steel Riser	15.00	5.00	10.00
CO37-PZM038	Cell 2 - MW9 (I)	Hollow Stem Auger	563268.500	1455154.680	12.12	Steel Riser	50.00	30.00	20.00
CO38-PZM006	Cell 2 - MW3 (S)	Hollow Stem Auger	563078.800	1454743.790	6.75	Steel Riser	13.00	3.00	10.00
CO38-PZM043	Cell 2 - MW10 (I)	Hollow Stem Auger	563078.330	1454737.750	6.65	Steel Riser	50.00	30.00	20.00
CO39-PZM007	Cell 2 - MW4 (S)	Hollow Stem Auger	563141.660	1455095.700	7.75	Steel Riser	15.00	5.00	10.00
CO39-PZM042	Cell 2 - MW11 (I)	Hollow Stem Auger	563140.070	1455089.800	7.91	Steel Riser	50.00	30.00	20.00
CO40-PZM008	Cell 2 - MW5 (S)	Hollow Stem Auger	563039.410	1455081.700	7.47	Steel Riser	15.00	5.00	10.00
CO41-PZM001	Cell 2 - MW6 (S)	Hollow Stem Auger	562873.180	1454953.000	13.57	Steel Riser	15.00	5.00	10.00
CO41-PZM036	Cell 2 - MW12 (I)	Hollow Stem Auger	562865.340	1454950.750	13.60	Steel Riser	50.00	30.00	20.00
CO42-PZM004	Cell 2 - MW7 (S)	Hollow Stem Auger	563177.720	1455458.510	10.83	Steel Riser	15.00	5.00	10.00
CO179-MWS	COM-MWS	Hollow Stem Auger	563262.590	1455064.510	8.11	Steel Riser	15.00	5.00	10.00
CO180-MWS	CON-MWS	Hollow Stem Auger	563190.140	1454350.590	12.01	Steel Riser	15.00	5.00	10.00
CO180-MWI	CON-MWI	Hollow Stem Auger	563192.150	1454354.470	11.99	Steel Riser	50.00	30.00	20.00
CO181-MWS	COO-MWS	Hollow Stem Auger	563024.250	1454318.340	12.70	Steel Riser	15.00	5.00	10.00
CO181-MWI	COO-MWI	Hollow Stem Auger	563028.380	1454319.030	12.68	Steel Riser	50.00	30.00	20.00
CO182-MWI	COP-MWI	Hollow Stem Auger	563127.660	1454935.030	7.53	Steel Riser	50.00	30.00	20.00
CO186-MWS	COT-MWS	Hollow Stem Auger	562911.800	1455128.850	11.74	Steel Riser	20.00	5.00	15.00
CO209-MWS	none	Hollow Stem Auger	562600.385	1453757.934	10.70	Steel Riser	25.00	15.00	10.00
CO209-MWI	none	Hollow Stem Auger	562605.794	1453757.191	10.43	Steel Riser	50.00	40.00	10.00
GD01-MWI	none	Hollow Stem Auger	563597.259	1454233.229	7.30	Steel Riser	50.00	40.00	10.00
GD02-MWI	none	Hollow Stem Auger	563649.399	1454827.562	8.89	Steel Riser	50.00	40.00	10.00

Table C2-2
Cell 2 Monitoring Well Groundwater Elevations

Well ID	Temporary Well ID	Top of PVC Elevation (ft)	Aquifer	Well Depth from Ground Surface (ft)	3/8/2021		6/1/2021		8/30/21 - 8/31/21		12/6/21 -12/7/21	
					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	none	5.12	S		5.02	0.10	4.59	0.53	4.26	0.86	4.91	0.21
CO27-PZM046	none	5.17	I		8.33	-3.16	7.23	-2.06	6.94	-1.77	7.78	-2.61
CO36-PZM008	Cell 2 - MW1 (S)	6.94	S	15.00	7.23	-0.29	6.61	0.33	6.16	0.78	6.94	0.00
CO36-PZM043	Cell 2 - MW8 (I)	6.92	I	50.00	7.89	-0.97	7.19	-0.27	6.72	0.20	7.44	-0.52
CO37-PZM038	Cell 2 - MW9 (I)	12.12	I	50.00	12.58	-0.46	12.45	-0.33	11.89	0.23	12.78	-0.66
CO38-PZM006	Cell 2 - MW3 (S)	6.75	S	13.00	6.51	0.24	6.18	0.57	5.76	0.99	6.57	0.18
CO38-PZM043	Cell 2 - MW10 (I)	6.65	I	50.00	7.59	-0.94	6.98	-0.33	6.53	0.12	7.26	-0.61
CO39-PZM007	Cell 2 - MW4 (S)	7.75	S	15.00	6.20	1.55	7.00	0.75	6.54	1.21	7.15	0.60
CO39-PZM042	Cell 2 - MW11 (I)	7.91	I	50.00	8.62	-0.71	8.26	-0.35	7.84	0.07	8.45	-0.54
CO40-PZM008	Cell 2 - MW5 (S)	7.47	S	15.00	7.60	-0.13	6.83	0.64	6.39	1.08	7.18	0.29
CO41-PZM001	Cell 2 - MW6 (S)	13.57	S	15.00	12.45	1.12	12.68	0.89	12.30	1.27	13.06	0.51
CO41-PZM036	Cell 2 - MW12 (I)	13.60	I	50.00	13.96	-0.36	13.63	-0.03	13.11	0.49	13.84	-0.24
CO42-PZM004	Cell 2 - MW7 (S)	10.83	S	15.00	5.92	4.91	8.54	2.29	8.18	2.65	8.42	2.41
CO43-PZM048	Extraction Well 1	0.00	I	48.00	NM	NM	NM	NM	NM	NM	NM	NM
CO44-PZM048	Extraction Well 2	0.00	I	48.00	NM	NM	NM	NM	NM	NM	NM	NM
CO45-PZM047	Extraction Well 3	0.00	I	47.00	NM	NM	NM	NM	NM	NM	NM	NM
CO46-PZM047	Extraction Well 4	0.00	I	47.00	NM	NM	NM	NM	NM	NM	NM	NM
CO47-PZM046	Extraction Well 5	0.00	I	46.00	NM	NM	NM	NM	NM	NM	NM	NM
CO48-PZM044	Extraction Well 6	0.00	I	44.00	NM	NM	NM	NM	NM	NM	NM	NM

Notes:

I = Intermediate depth well

S = Water table well

NM = Not Measured

Table C2-3: Summary of Operation
Cell 2: Groundwater Pump Treat System in Former Coal Basin Area

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	641,258	549,960	608,627	658,629	2,458,474
Total Operating Time	hours	1,752	1,752	1,919	1,774	7,196
Overall Operational Time	%	81.1%	80.2%	86.9%	80.3%	82.1%
Extracted Total Concentrations	lbs/gal	1.98E-03	1.86E-03	2.11E-03	2.09E-03	8.04E-03
Effluent Total Concentrations	lbs/gal	8.46E-07	1.14E-06	8.19E-07	3.15E-06	5.96E-06
Extracted Hydrocarbons	lbs	1,269	1,024	1,285	1,374	4,952
Effluent Hydrocarbons	lbs	0.54	0.63	0.50	2.08	3.75
Total Hydrocarbons Removed	lbs	1,268	1,024	1,285	1,371	4,948

Table C2-4
Cell 2 Groundwater Analytical Results

Sample ID		CO27-PZM012				CO37-PZM003			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/9/2021	5/27/2021	9/14/2021	11/16/2021	*NS*	6/7/2021	*NS*	*NS*
Volatile Organic Compound	**Units**								
Benzene	µg/L	**12,700**	**9,230**	**8,490**	**8,340**	*NS*	**7,120**	*NS*	*NS*
Ethylbenzene	µg/L	**28.2**	**64.5**	**101**	**98.9**	*NS*	**133**	*NS*	*NS*
Toluene	µg/L	**1,060**	**2,680**	**2,750**	**2,430**	*NS*	**3,000**	*NS*	*NS*
Xylenes	µg/L	**234**	**777**	**843**	**795**	*NS*	**1,310**	*NS*	*NS*
Total Volatile Organics	µg/L	**14,022**	**12,752**	**12,184**	**11,664**	*NS*	**11,563**	*NS*	*NS*
Semi-Volatile Organic Compound	**Units**								
Naphthalene	µg/L	**1,120**	**383**	**793**	**661**	*NS*	**1,270**	*NS*	*NS*

Sample ID		CO27-PZM046				CO37-PZM038			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/9/2021	5/27/2021	9/14/2021	11/16/2021	3/9/2021	6/7/2021	9/13/2021	12/01/2021
Volatile Organic Compound	**Units**								
Benzene	µg/L	**22,300**	**15,600**	**8,620**	**18,700**	**16,400**	**16,000**	**16,000**	**17,800**
Ethylbenzene	µg/L	**46.6**	**202**	**107**	**247**	**217**	**268**	**281**	**279**
Toluene	µg/L	**1,450**	**5,560**	**2,650**	**6,180**	**8,710**	**8,240**	**8,350**	**10,300**
Xylenes	µg/L	**486**	**1,460**	**1,060**	**2,070**	**1,910**	**2,320**	**2,420**	**2370**
Total Volatile Organics	µg/L	**24,283**	**22,822**	**12,437**	**27,197**	**27,237**	**26,828**	**27,051**	**30,749**
Semi-Volatile Organic Compound	**Units**								
Naphthalene	µg/L	**290**	**847**	**3,680**	**1,450**	**1,210**	**1,850**	**15,600**	**1,590**

Notes:

Bold = Analyte Detected
µg/L = micrograms per liter
U = Analyte not detected above reporting limit
NS = Not Sampled

Table C2-4
Cell 2 Groundwater Analytical Results

Sample ID		CO36-PZM008				CO38-PZM006			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/9/2021	5/26/2021	9/9/2021	11/16/2021	3/9/2021	5/26/2021	9/14/2021	11/30/2021
Volatile Organic Compound	**Units**								
Benzene	µg/L	**9,050**	**38,700**	**17,700**	**20,400**	**9,970**	**4,110**	**4,500**	**5,070**
Ethylbenzene	µg/L	**18.7**	**61**	**61**	**89.5**	**52**	**46.1**	**59.3**	**58.7**
Toluene	µg/L	**1,570**	**8,940**	**4,160**	**4,460**	**1,080**	**800**	**871**	**1,130**
Xylenes	µg/L	**659**	**1,250**	**988**	**1510**	**420**	**373**	**446**	**462**
Total Volatile Organics	µg/L	**11,298**	**48,951**	**22,909**	**26,460**	**11,522**	**5,329**	**5,876**	**6,721**
Semi-Volatile Organic Compound	**Units**								
Naphthalene	µg/L	**378**	**540**	**769**	**943**	**1,140**	**981**	**1,620**	**1,660**

Sample ID		CO36-PZM043				CO38-PZM043			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/9/2021	5/26/2021	9/9/2021	11/16/2021	3/9/2021	5/26/2021	9/14/2021	11/30/2021
Volatile Organic Compound	**Units**								
Benzene	µg/L	**2,750**	**14,100**	**22,800**	**26,700**	*1 U*	**1.8**	**0.76 J**	*1 U*
Ethylbenzene	µg/L	*5 U*	**5.3**	**42.9**	**56.2**	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	**263**	**841**	**3,160**	**3,710**	*1 U*	**0.35 J**	*1 U*	*1 U*
Xylenes	µg/L	**134**	**287**	**711**	**855**	*3 U*	*3 U*	*3 U*	*3 U*
Total Volatile Organics	µg/L	**3,147**	**15,233**	**26,714**	**31,321**	**0**	**2**	**0**	**0**
Semi-Volatile Organic Compound	**Units**								
Naphthalene	µg/L	**131**	**187**	**835**	**667**	*2 U*	**9.4**	*2 U*	*2 U*

Notes:

Bold = Analyte Detected

µg/L = micrograms per liter

U = Analyte not detected above reporting limit

NS = Not Sampled

Table C2-4
Cell 2 Groundwater Analytical Results

Sample ID		CO39-PZM007				CO41-PZM036			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/9/2021	5/27/2021	9/9/2021	11/16/2021	3/10/2021	5/26/2021	9/14/2021	12/01/2021
Volatile Organic Compound	**Units**								
Benzene	µg/L	**249**	**3,120**	**7,320**	**9,720**	**288,000**	**283,000**	**272,000**	**351,000**
Ethylbenzene	µg/L	*5 U*	**6.9**	**21.8**	**39.5**	**628**	**6.2**	**774**	**880**
Toluene	µg/L	**12.2**	**487**	**1,080**	**1,640**	**168,000**	**893**	**90,700**	**118,000**
Xylenes	µg/L	*15 U*	**58**	**195**	**374**	**28,300**	**308**	**16,700**	**27300**
Total Volatile Organics	µg/L	**261**	**3,672**	**8,617**	**11,774**	**484,928**	**284,207**	**380,174**	**497,180**
Semi-Volatile Organic Compound	**Units**								
Naphthalene	µg/L	**171**	**353**	**1,020**	**1,340**	**370**	**195**	**418**	**290**

Sample ID		CO39-PZM042				CO42-PZM004			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/9/2021	5/27/2021	9/9/2021	11/16/2021	3/10/2021	5/27/2021	9/14/2021	12/01/2021
Volatile Organic Compound	**Units**								
Benzene	µg/L	**10,300**	**12,000**	**8,640**	**9,520**	*1 U*	**15.9**	**59.4**	**169**
Ethylbenzene	µg/L	**102**	**68**	**59**	**70.4**	*1 U*	**4.3**	**14.7**	**30.2**
Toluene	µg/L	**3,450**	**3,150**	**1,920**	**2,150**	*1 U*	**24**	**48.7**	**36**
Xylenes	µg/L	**869**	**624**	**503**	**595**	*3 U*	**37.2**	**84.9**	**129**
Total Volatile Organics	µg/L	**14,721**	**15,842**	**11,122**	**12,335**	**0**	**82**	**208**	**364**
Semi-Volatile Organic Compound	**Units**								
Naphthalene	µg/L	**705**	**1,270**	**1,590**	**1,420**	*2 U*	**9.3**	**66.7**	**109**

Notes:

Bold = Analyte Detected

µg/L = micrograms per liter

U = Analyte not detected above reporting limit

NS = Not Sampled

Table C2-4
Cell 2 Groundwater Analytical Results

Sample ID		CO40-PZM008				CO182-MWI			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/10/2021	6/8/2021	9/8/2021	11/16/2021	3/10/2021	5/27/2021	9/15/2021	12/01/2021
Volatile Organic Compound	**Units**								
Benzene	µg/L	**1,450**	**5,050**	**664**	**2,880**	**218,000**	**362000**	**317,000**	**336,000**
Ethylbenzene	µg/L	**8.7**	**61.3**	**3.5**	**20.8**	**322**	**1020**	**911**	**1010**
Toluene	µg/L	**197**	**712**	**75.7**	**291**	**45,700**	**60,400**	**44,000**	**40,000**
Xylenes	µg/L	**68.1**	**367**	**25.1**	**153**	**8,870**	**12600**	**12,100**	**12900**
Total Volatile Organics	µg/L	**1,724**	**6,190**	**768**	**3,345**	**272,892**	**436,020**	**374,011**	**389,910**
Semi-Volatile Organic Compound	**Units**								
Naphthalene	µg/L	**1,220**	**2,260**	**336**	**1,570**	**191**	**153**	**320**	**218**

Sample ID		CO41-PZM001				GD01-MWI	
Quarter		Q1	Q2	Q3	Q4	Q2	Q4
Event Date		3/10/2021	5/26/2021	9/14/2021	12/01/2021	6/8/2021	12/09/2021
Volatile Organic Compound	**Units**						
Benzene	µg/L	**7.3**	**1,740**	**124**	**17,400**	**10**	**16.9**
Ethylbenzene	µg/L	**0.52 J**	**85.8**	**3.6**	**564**	*1 U*	*1 U*
Toluene	µg/L	**2.2**	**1,200**	**44.5**	**11,200**	*1 U*	**0.41 J**
Xylenes	µg/L	**1.4 J**	**760**	**25.2**	**5,190**	*3 U*	*3 U*
Total Volatile Organics	µg/L	**10**	**3,786**	**197**	**34,354**	**10**	**17**
Semi-Volatile Organic Compound	**Units**						
Naphthalene	µg/L	**14.3**	**29.3**	**3.4**	**332**	*2 U*	*2 U*

Notes:

Bold = Analyte Detected

µg/L = micrograms per liter

U = Analyte not detected above reporting limit

NS = Not Sampled

Table C2-4
Cell 2 Groundwater Analytical Results

Sample ID		CO180-MWS	CO181-MWS	CO186-MWS	CO209-MWS
Quarter		Q2	Q2	Q2	Q2
Event Date		6/3/2021	6/7/2021	6/7/2021	6/3/2021
Volatile Organic Compound	**Units**				
Benzene	µg/L	**786**	**28,400**	**47,100**	**12.7**
Ethylbenzene	µg/L	**3.7 J**	**145**	**119**	**2.1 J**
Toluene	µg/L	**180**	**5,810**	**14,600**	**5.2**
Xylenes	µg/L	**54.5**	**1,920**	**2,140**	**18.8**
Total Volatile Organics	µg/L	**1,021**	**36,275**	**63,959**	**37**
Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**63**	**3,710**	**32**	**3,940**

Sample ID		CO28-PZM010	CO28-PZM048
Quarter		Q2	Q2
Event Date		5/27/2021	5/27/2021
Volatile Organic Compound	**Units**		
Benzene	µg/L	**1**	**128,000**
Ethylbenzene	µg/L	*1 U*	**290**
Toluene	µg/L	*1 U*	**5,670**
Xylenes	µg/L	*3 U*	**5,850**
Total Volatile Organics	µg/L	**1**	**139,810**
Semi-Volatile Organic Compound	**Units**		
Naphthalene	µg/L	*2 U*	**2,750**

Notes:

Bold = Analyte Detected
µg/L = micrograms per liter
U = Analyte not detected above reporting limit
NS = Not Sampled

Table C2-4
Cell 2 Groundwater Analytical Results

Sample ID		CO180-MWI	CO181-MWI	CO209-MWI	CO28-PZM048
Quarter		Q2	Q2	Q2	Q2
Event Date		6/3/2021	6/7/2021	6/3/2021	5/27/2021
Volatile Organic Compound	**Units**				
Benzene	µg/L	**39,700**	**9,870**	**1,120**	**128,000**
Ethylbenzene	µg/L	**159**	**71.5**	**45.2**	**290**
Toluene	µg/L	**8,700**	**2,920**	**2.6 J**	**5,670**
Xylenes	µg/L	**2,690**	**1,180**	**32.3**	**5,850**
Total Volatile Organics	µg/L	**51,249**	**14,042**	**1,198**	**139,810**
Semi-Volatile Organic Compound	**Units**				
Naphthalene	µg/L	**2,540**	**1,320**	**11,100**	**2,750**

Sample ID		GD02-MWI	
Quarter		Q2	Q4
Event Date		6/8/2021	12/09/2021
Volatile Organic Compound	**Units**		
Benzene	µg/L	**78,200**	**127,000**
Ethylbenzene	µg/L	**452**	**546**
Toluene	µg/L	**24**	**339**
Xylenes	µg/L	**575**	**327**
Total Volatile Organics	µg/L	**79,251**	**128,212**
Semi-Volatile Organic Compound	**Units**		
Naphthalene	µg/L	**1,840**	**1,910**

Notes:

Bold = Analyte Detected

µg/L = micrograms per liter

U = Analyte not detected above reporting limit

NS = Not Sampled

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

Cell 3 2021 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[1]	SCFM	292	251	239	249	258
Average Concentrations	ug/m^3	29	5	1	1	36
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.031	0.005	0.001	0.001	0.009
Total VGAC Operating Time	hours	528	2,148	2,176	611	5,462
Overall VGAC Operational Time	%	24.4%	98.3%	98.5%	27.7%	62.2%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	16.5	9.8	1.4	0.8	28.5

NS = Not Sampled

[1]Flow rates are calculated using the recorded sparge temperature instead of the actual pitot tube temperature.

Cell 3 Cumulative Summary of Estimated Hydrocarbon Recovery

June 24, 2011 - December 31, 2021

Parameter	Units	Quantity
Total VGAC Operating Time	hours	47,771
Overall VGAC Operational Time	%	51.8%
Estimated Total Hydrocarbons Destroyed/Removed	pounds	2,229
Estimated Hydrocarbon Destruction/Removal Rate	pounds/hour	0.0467

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

Month		January	February	March
Analyte (TO-15 Organics)	**Units**	1/22/2021	2/10/2021	3/5/2021
Acetone	ug/L	*ND*	*ND*	*ND*
tert-Amyl alcohol (TAA)	ug/L	*ND*	*ND*	*ND*
tert-Amyl ethyl ether (TAEE)	ug/L	*ND*	*ND*	*ND*
tert-Amyl methyl ether (TAME)	ug/L	*ND*	*ND*	*ND*
Benzene	ug/L	**24**	**30**	**25**
Bromobenzene	ug/L	*ND*	*ND*	*ND*
Bromochloromethane	ug/L	*ND*	*ND*	*ND*
Bromodichloromethane	ug/L	*ND*	*ND*	*ND*
Bromoform	ug/L	*ND*	*ND*	*ND*
Bromomethane	ug/L	*ND*	*ND*	*ND*
tert-Butanol (TBA)	ug/L	*ND*	*ND*	*ND*
2-Butanone (MEK)	ug/L	*ND*	*ND*	*ND*
n-Butylbenzene	ug/L	*ND*	*ND*	*ND*
sec-Butylbenzene	ug/L	*ND*	*ND*	*ND*
tert-Butylbenzene	ug/L	*ND*	*ND*	*ND*
Carbon disulfide	ug/L	*ND*	*ND*	*ND*
Carbon tetrachloride	ug/L	*ND*	*ND*	*ND*
Chlorobenzene	ug/L	*ND*	*ND*	*ND*
Chloroethane	ug/L	*ND*	*ND*	*ND*
Chloroform	ug/L	*ND*	*ND*	*ND*
Chloromethane	ug/L	*ND*	*ND*	*ND*
2-Chlorotoluene	ug/L	*ND*	*ND*	*ND*
4-Chlorotoluene	ug/L	*ND*	*ND*	*ND*
1,2-Dibromo-3-chloropropane	ug/L	*ND*	*ND*	*ND*
Dibromochloromethane	ug/L	*ND*	*ND*	*ND*
1,2-Dibromoethane (EDB)	ug/L	*ND*	*ND*	*ND*
Dibromomethane	ug/L	*ND*	*ND*	*ND*
1,2-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,3-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,4-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*
Dichlorodifluoromethane	ug/L	*ND*	*ND*	*ND*
1,1-Dichloroethane	ug/L	*ND*	*ND*	*ND*
1,2-Dichloroethane	ug/L	*ND*	*ND*	*ND*
1,1-Dichloroethene	ug/L	*ND*	*ND*	*ND*
cis-1,2-Dichloroethene	ug/L	*ND*	*ND*	*ND*
trans-1,2-Dichloroethene	ug/L	*ND*	*ND*	*ND*
Dichlorofluoromethane	ug/L	*ND*	*ND*	*ND*
1,2-Dichloropropane	ug/L	*ND*	*ND*	*ND*
1,3-Dichloropropane	ug/L	*ND*	*ND*	*ND*
2,2-Dichloropropane	ug/L	*ND*	*ND*	*ND*
1,1-Dichloropropene	ug/L	*ND*	*ND*	*ND*
cis-1,3-Dichloropropene	ug/L	*ND*	*ND*	*ND*
trans-1,3-Dichloropropene	ug/L	*ND*	*ND*	*ND*
Diisopropyl ether (DlPE)	ug/L	*ND*	*ND*	*ND*
Ethyl tert-butyl ether (ETBE)	ug/L	*ND*	*ND*	*ND*
Ethylbenzene	ug/L	*ND*	*ND*	*ND*
Hexachlorobutadiene	ug/L	*ND*	*ND*	*ND*
2-Hexanone	ug/L	*ND*	*ND*	*ND*
lsopropylbenzene (Cumene)	ug/L	*ND*	*ND*	*ND*
4-lsopropyltoluene	ug/L	*ND*	*ND*	*ND*
Methyl tert-butyl ether (MTBE)	ug/L	*ND*	*ND*	*ND*
4-Methyl-2-pentanone	ug/L	*ND*	*ND*	*ND*
Methylene chloride	ug/L	*ND*	*ND*	*ND*
Naphthalene	ug/L	*ND*	*ND*	*ND*
n-Propylbenzene	ug/L	*ND*	*ND*	*ND*
Styrene	ug/L	*ND*	*ND*	*ND*
1,1,1,2-Tetrachloroethane	ug/L	*ND*	*ND*	*ND*
1,1,2,2-Tetrachloroethane	ug/L	*ND*	*ND*	*ND*
Tetrachloroethene	ug/L	*ND*	*ND*	*ND*
Toluene	ug/L	**2**	**2**	**2**
1,2,3-Trichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,2,4-Trichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,1,1-Trichloroethane	ug/L	*ND*	*ND*	*ND*
1,1,2-Trichloroethane	ug/L	*ND*	*ND*	*ND*
Trichloroethene	ug/L	*ND*	*ND*	*ND*
Trichlorofluoromethane (Freon 11)	ug/L	*ND*	*ND*	*ND*
1,2,3-Trichloropropane	ug/L	*ND*	*ND*	*ND*
1,2,4-Trimethylbenzene	ug/L	*ND*	*ND*	*ND*
1,3,5-Trimethylbenzene	ug/L	*ND*	*ND*	*ND*
Vinyl chloride	ug/L	*ND*	*ND*	*ND*
o-Xylene	ug/L	*ND*	*ND*	*ND*
m- & p-Xylenes	ug/L	**0**	**0**	**0.22**
Total Volatile Organics	ug/L	26	32	28

Notes:

BOLD = Analyte detected

ug/L = micro grams per liter

U = Analyte not detected above reporting limit.

NS = Not Sampled

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

Month		April	May	June
Analyte (TO-15 Organics)	**Units**	4/7/2021	5/14/2021	6/10/2021
Acetone	ug/L	*ND*	*ND*	*ND*
tert-Amyl alcohol (TAA)	ug/L	*ND*	*ND*	*ND*
tert-Amyl ethyl ether (TAEE)	ug/L	*ND*	*ND*	*ND*
tert-Amyl methyl ether (TAME)	ug/L	*ND*	*ND*	*ND*
Benzene	ug/L	**2**	**9**	**2**
Bromobenzene	ug/L	*ND*	*ND*	*ND*
Bromochloromethane	ug/L	*ND*	*ND*	*ND*
Bromodichloromethane	ug/L	*ND*	*ND*	*ND*
Bromoform	ug/L	*ND*	*ND*	*ND*
Bromomethane	ug/L	*ND*	*ND*	*ND*
tert-Butanol (TBA)	ug/L	*ND*	*ND*	*ND*
2-Butanone (MEK)	ug/L	*ND*	*ND*	*ND*
n-Butylbenzene	ug/L	*ND*	*ND*	*ND*
sec-Butylbenzene	ug/L	*ND*	*ND*	*ND*
tert-Butylbenzene	ug/L	*ND*	*ND*	*ND*
Carbon disulfide	ug/L	*ND*	*ND*	*ND*
Carbon tetrachloride	ug/L	*ND*	*ND*	*ND*
Chlorobenzene	ug/L	*ND*	*ND*	*ND*
Chloroethane	ug/L	*ND*	*ND*	*ND*
Chloroform	ug/L	*ND*	*ND*	*ND*
Chloromethane	ug/L	*ND*	*ND*	*ND*
2-Chlorotoluene	ug/L	*ND*	*ND*	*ND*
4-Chlorotoluene	ug/L	*ND*	*ND*	*ND*
1,2-Dibromo-3-chloropropane	ug/L	*ND*	*ND*	*ND*
Dibromochloromethane	ug/L	*ND*	*ND*	*ND*
1,2-Dibromoethane (EDB)	ug/L	*ND*	*ND*	*ND*
Dibromomethane	ug/L	*ND*	*ND*	*ND*
1,2-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,3-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,4-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*
Dichlorodifluoromethane	ug/L	*ND*	*ND*	*ND*
1,1-Dichloroethane	ug/L	*ND*	*ND*	*ND*
1,2-Dichloroethane	ug/L	*ND*	*ND*	*ND*
1,1-Dichloroethene	ug/L	*ND*	*ND*	*ND*
cis-1,2-Dichloroethene	ug/L	*ND*	*ND*	*ND*
trans-1,2-Dichloroethene	ug/L	*ND*	*ND*	*ND*
Dichlorofluoromethane	ug/L	*ND*	*ND*	*ND*
1,2-Dichloropropane	ug/L	*ND*	*ND*	*ND*
1,3-Dichloropropane	ug/L	*ND*	*ND*	*ND*
2,2-Dichloropropane	ug/L	*ND*	*ND*	*ND*
1,1-Dichloropropene	ug/L	*ND*	*ND*	*ND*
cis-1,3-Dichloropropene	ug/L	*ND*	*ND*	*ND*
trans-1,3-Dichloropropene	ug/L	*ND*	*ND*	*ND*
Diisopropyl ether (DlPE)	ug/L	*ND*	*ND*	*ND*
Ethyl tert-butyl ether (ETBE)	ug/L	*ND*	*ND*	*ND*
Ethylbenzene	ug/L	*ND*	*ND*	*ND*
Hexachlorobutadiene	ug/L	*ND*	*ND*	*ND*
2-Hexanone	ug/L	*ND*	*ND*	*ND*
lsopropylbenzene (Cumene)	ug/L	*ND*	*ND*	*ND*
4-lsopropyltoluene	ug/L	*ND*	*ND*	*ND*
Methyl tert-butyl ether (MTBE)	ug/L	*ND*	*ND*	*ND*
4-Methyl-2-pentanone	ug/L	*ND*	*ND*	*ND*
Methylene chloride	ug/L	*ND*	*ND*	*ND*
Naphthalene	ug/L	*ND*	*ND*	*ND*
n-Propylbenzene	ug/L	*ND*	*ND*	*ND*
Styrene	ug/L	*ND*	*ND*	*ND*
1,1,1,2-Tetrachloroethane	ug/L	*ND*	*ND*	*ND*
1,1,2,2-Tetrachloroethane	ug/L	*ND*	*ND*	*ND*
Tetrachloroethene	ug/L	*ND*	*ND*	*ND*
Toluene	ug/L	**0**	**1**	**0**
1,2,3-Trichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,2,4-Trichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,1,1-Trichloroethane	ug/L	*ND*	*ND*	*ND*
1,1,2-Trichloroethane	ug/L	*ND*	*ND*	*ND*
Trichloroethene	ug/L	*ND*	*ND*	*ND*
Trichlorofluoromethane (Freon 11)	ug/L	*ND*	*ND*	*ND*
1,2,3-Trichloropropane	ug/L	*ND*	*ND*	*ND*
1,2,4-Trimethylbenzene	ug/L	*ND*	*ND*	*ND*
1,3,5-Trimethylbenzene	ug/L	*ND*	*ND*	*ND*
Vinyl chloride	ug/L	*ND*	*ND*	*ND*
o-Xylene	ug/L	*ND*	*ND*	*ND*
m- & p-Xylenes	ug/L	*ND*	*ND*	*ND*
Total Volatile Organics	ug/L	3	10	2

Notes:

BOLD = Analyte detected

ug/L = micro grams per liter

U = Analyte not detected above reporting limit.

NS = Not Sampled

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

Month		July	August	September
Analyte (TO-15 Organics)	**Units**	7/15/2021	8/4/2021	9/1/2021
Acetone	ug/L	*ND*	*ND*	*ND*
tert-Amyl alcohol (TAA)	ug/L	*ND*	*ND*	*ND*
tert-Amyl ethyl ether (TAEE)	ug/L	*ND*	*ND*	*ND*
tert-Amyl methyl ether (TAME)	ug/L	*ND*	*ND*	*ND*
Benzene	ug/L	**1**	**1**	**0.17**
Bromobenzene	ug/L	*ND*	*ND*	*ND*
Bromochloromethane	ug/L	*ND*	*ND*	*ND*
Bromodichloromethane	ug/L	*ND*	*ND*	*ND*
Bromoform	ug/L	*ND*	*ND*	*ND*
Bromomethane	ug/L	*ND*	*ND*	*ND*
tert-Butanol (TBA)	ug/L	*ND*	*ND*	*ND*
2-Butanone (MEK)	ug/L	*ND*	*ND*	*ND*
n-Butylbenzene	ug/L	*ND*	*ND*	*ND*
sec-Butylbenzene	ug/L	*ND*	*ND*	*ND*
tert-Butylbenzene	ug/L	*ND*	*ND*	*ND*
Carbon disulfide	ug/L	*ND*	*ND*	*ND*
Carbon tetrachloride	ug/L	*ND*	*ND*	*ND*
Chlorobenzene	ug/L	*ND*	*ND*	*ND*
Chloroethane	ug/L	*ND*	*ND*	*ND*
Chloroform	ug/L	*ND*	*ND*	*ND*
Chloromethane	ug/L	*ND*	*ND*	*ND*
2-Chlorotoluene	ug/L	*ND*	*ND*	*ND*
4-Chlorotoluene	ug/L	*ND*	*ND*	*ND*
1,2-Dibromo-3-chloropropane	ug/L	*ND*	*ND*	*ND*
Dibromochloromethane	ug/L	*ND*	*ND*	*ND*
1,2-Dibromoethane (EDB)	ug/L	*ND*	*ND*	*ND*
Dibromomethane	ug/L	*ND*	*ND*	*ND*
1,2-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,3-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,4-Dichlorobenzene	ug/L	*ND*	*ND*	*ND*
Dichlorodifluoromethane	ug/L	*ND*	*ND*	*ND*
1,1-Dichloroethane	ug/L	*ND*	*ND*	*ND*
1,2-Dichloroethane	ug/L	*ND*	*ND*	*ND*
1,1-Dichloroethene	ug/L	*ND*	*ND*	*ND*
cis-1,2-Dichloroethene	ug/L	*ND*	*ND*	*ND*
trans-1,2-Dichloroethene	ug/L	*ND*	*ND*	*ND*
Dichlorofluoromethane	ug/L	*ND*	*ND*	*ND*
1,2-Dichloropropane	ug/L	*ND*	*ND*	*ND*
1,3-Dichloropropane	ug/L	*ND*	*ND*	*ND*
2,2-Dichloropropane	ug/L	*ND*	*ND*	*ND*
1,1-Dichloropropene	ug/L	*ND*	*ND*	*ND*
cis-1,3-Dichloropropene	ug/L	*ND*	*ND*	*ND*
trans-1,3-Dichloropropene	ug/L	*ND*	*ND*	*ND*
Diisopropyl ether (DlPE)	ug/L	*ND*	*ND*	*ND*
Ethyl tert-butyl ether (ETBE)	ug/L	*ND*	*ND*	*ND*
Ethylbenzene	ug/L	*ND*	*ND*	*ND*
Hexachlorobutadiene	ug/L	*ND*	*ND*	*ND*
2-Hexanone	ug/L	*ND*	*ND*	*ND*
lsopropylbenzene (Cumene)	ug/L	*ND*	*ND*	*ND*
4-lsopropyltoluene	ug/L	*ND*	*ND*	*ND*
Methyl tert-butyl ether (MTBE)	ug/L	*ND*	*ND*	*ND*
4-Methyl-2-pentanone	ug/L	*ND*	*ND*	*ND*
Methylene chloride	ug/L	*ND*	*ND*	*ND*
Naphthalene	ug/L	*ND*	*ND*	*ND*
n-Propylbenzene	ug/L	*ND*	*ND*	*ND*
Styrene	ug/L	*ND*	*ND*	*ND*
1,1,1,2-Tetrachloroethane	ug/L	*ND*	*ND*	*ND*
1,1,2,2-Tetrachloroethane	ug/L	*ND*	*ND*	*ND*
Tetrachloroethene	ug/L	*ND*	*ND*	*ND*
Toluene	ug/L	**0**	*ND*	*ND*
1,2,3-Trichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,2,4-Trichlorobenzene	ug/L	*ND*	*ND*	*ND*
1,1,1-Trichloroethane	ug/L	*ND*	*ND*	*ND*
1,1,2-Trichloroethane	ug/L	*ND*	*ND*	*ND*
Trichloroethene	ug/L	*ND*	*ND*	*ND*
Trichlorofluoromethane (Freon 11)	ug/L	*ND*	*ND*	*ND*
1,2,3-Trichloropropane	ug/L	*ND*	*ND*	*ND*
1,2,4-Trimethylbenzene	ug/L	*ND*	*ND*	*ND*
1,3,5-Trimethylbenzene	ug/L	*ND*	*ND*	*ND*
Vinyl chloride	ug/L	*ND*	*ND*	*ND*
o-Xylene	ug/L	*ND*	*ND*	*ND*
m- & p-Xylenes	ug/L	*ND*	*ND*	*ND*
Total Volatile Organics	ug/L	**1**	**1**	**0**

Notes:

BOLD = Analyte detected

ug/L = micro grams per liter

U = Analyte not detected above reporting limit.

NS = Not Sampled

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

Month		October	November	December
Analyte (TO-15 Organics)	**Units**	10/4/2021	*NS*	*NS*
Acetone	ug/L	*ND*	*NS*	*NS*
tert-Amyl alcohol (TAA)	ug/L	*ND*	*NS*	*NS*
tert-Amyl ethyl ether (TAEE)	ug/L	*ND*	*NS*	*NS*
tert-Amyl methyl ether (TAME)	ug/L	*ND*	*NS*	*NS*
Benzene	ug/L	**1**	*NS*	*NS*
Bromobenzene	ug/L	*ND*	*NS*	*NS*
Bromochloromethane	ug/L	*ND*	*NS*	*NS*
Bromodichloromethane	ug/L	*ND*	*NS*	*NS*
Bromoform	ug/L	*ND*	*NS*	*NS*
Bromomethane	ug/L	*ND*	*NS*	*NS*
tert-Butanol (TBA)	ug/L	*ND*	*NS*	*NS*
2-Butanone (MEK)	ug/L	*ND*	*NS*	*NS*
n-Butylbenzene	ug/L	*ND*	*NS*	*NS*
sec-Butylbenzene	ug/L	*ND*	*NS*	*NS*
tert-Butylbenzene	ug/L	*ND*	*NS*	*NS*
Carbon disulfide	ug/L	*ND*	*NS*	*NS*
Carbon tetrachloride	ug/L	*ND*	*NS*	*NS*
Chlorobenzene	ug/L	*ND*	*NS*	*NS*
Chloroethane	ug/L	*ND*	*NS*	*NS*
Chloroform	ug/L	*ND*	*NS*	*NS*
Chloromethane	ug/L	*ND*	*NS*	*NS*
2-Chlorotoluene	ug/L	*ND*	*NS*	*NS*
4-Chlorotoluene	ug/L	*ND*	*NS*	*NS*
1,2-Dibromo-3-chloropropane	ug/L	*ND*	*NS*	*NS*
Dibromochloromethane	ug/L	*ND*	*NS*	*NS*
1,2-Dibromoethane (EDB)	ug/L	*ND*	*NS*	*NS*
Dibromomethane	ug/L	*ND*	*NS*	*NS*
1,2-Dichlorobenzene	ug/L	*ND*	*NS*	*NS*
1,3-Dichlorobenzene	ug/L	*ND*	*NS*	*NS*
1,4-Dichlorobenzene	ug/L	*ND*	*NS*	*NS*
Dichlorodifluoromethane	ug/L	*ND*	*NS*	*NS*
1,1-Dichloroethane	ug/L	*ND*	*NS*	*NS*
1,2-Dichloroethane	ug/L	*ND*	*NS*	*NS*
1,1-Dichloroethene	ug/L	*ND*	*NS*	*NS*
cis-1,2-Dichloroethene	ug/L	*ND*	*NS*	*NS*
trans-1,2-Dichloroethene	ug/L	*ND*	*NS*	*NS*
Dichlorofluoromethane	ug/L	*ND*	*NS*	*NS*
1,2-Dichloropropane	ug/L	*ND*	*NS*	*NS*
1,3-Dichloropropane	ug/L	*ND*	*NS*	*NS*
2,2-Dichloropropane	ug/L	*ND*	*NS*	*NS*
1,1-Dichloropropene	ug/L	*ND*	*NS*	*NS*
cis-1,3-Dichloropropene	ug/L	*ND*	*NS*	*NS*
trans-1,3-Dichloropropene	ug/L	*ND*	*NS*	*NS*
Diisopropyl ether (DlPE)	ug/L	*ND*	*NS*	*NS*
Ethyl tert-butyl ether (ETBE)	ug/L	*ND*	*NS*	*NS*
Ethylbenzene	ug/L	*ND*	*NS*	*NS*
Hexachlorobutadiene	ug/L	*ND*	*NS*	*NS*
2-Hexanone	ug/L	*ND*	*NS*	*NS*
lsopropylbenzene (Cumene)	ug/L	*ND*	*NS*	*NS*
4-lsopropyltoluene	ug/L	*ND*	*NS*	*NS*
Methyl tert-butyl ether (MTBE)	ug/L	*ND*	*NS*	*NS*
4-Methyl-2-pentanone	ug/L	*ND*	*NS*	*NS*
Methylene chloride	ug/L	*ND*	*NS*	*NS*
Naphthalene	ug/L	*ND*	*NS*	*NS*
n-Propylbenzene	ug/L	*ND*	*NS*	*NS*
Styrene	ug/L	*ND*	*NS*	*NS*
1,1,1,2-Tetrachloroethane	ug/L	*ND*	*NS*	*NS*
1,1,2,2-Tetrachloroethane	ug/L	*ND*	*NS*	*NS*
Tetrachloroethene	ug/L	*ND*	*NS*	*NS*
Toluene	ug/L	**0**	*NS*	*NS*
1,2,3-Trichlorobenzene	ug/L	*ND*	*NS*	*NS*
1,2,4-Trichlorobenzene	ug/L	*ND*	*NS*	*NS*
1,1,1-Trichloroethane	ug/L	*ND*	*NS*	*NS*
1,1,2-Trichloroethane	ug/L	*ND*	*NS*	*NS*
Trichloroethene	ug/L	*ND*	*NS*	*NS*
Trichlorofluoromethane (Freon 11)	ug/L	*ND*	*NS*	*NS*
1,2,3-Trichloropropane	ug/L	*ND*	*NS*	*NS*
1,2,4-Trimethylbenzene	ug/L	*ND*	*NS*	*NS*
1,3,5-Trimethylbenzene	ug/L	*ND*	*NS*	*NS*
Vinyl chloride	ug/L	*ND*	*NS*	*NS*
o-Xylene	ug/L	*ND*	*NS*	*NS*
m- & p-Xylenes	ug/L	*ND*	*NS*	*NS*
Total Volatile Organics	ug/L	**1.43**	*NS*	*NS*

Notes:

BOLD = Analyte detected

ug/L = micro grams per liter

U = Analyte not detected above reporting limit.

NS = Not Sampled

Table C3-3
Cell 3 Groundwater Analytical Results

Sample ID		CO30-PZM015				CO195-MWS			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/11/2021	5/24/2021	9/16/2021	12/8/2021	3/11/2021	5/24/2021	9/15/2021	12/8/2021
Volatile Organic Compounds	**Units**								
Benzene	µg/L	**98,700**	**64,000**	**678**	**57,000**	**67,300**	**18,000**	**53,900**	**59,000**
Ethylbenzene	µg/L	**105**	**95.2**	*5 U*	**94.6**	**69.6**	**21.8**	**76.2**	**82.3**
Toluene	µg/L	**7,990**	**16,300**	**49.1**	**4,650**	**5,540**	**1,220**	**3,350**	**4,340**
Xylenes	µg/L	**1,480**	**1,360**	**17.9**	**1,380**	**930**	**305**	**980**	**1,160**
Total Volatile Organics	µg/L	**108,275**	**81,755**	**745**	**63,125**	**73,840**	**19,547**	**58,306**	**64,582**
Semi-Volatile Organic Compounds	**Units**								
Naphthalene	µg/L	**8,420**	**1,790**	**542**	**2,300**	**1,650**	**493**	**3,940**	**2,400**

Notes:

Bold = Analyte Detected
NS = Not Sampled
µg/L = Micrograms per liter
U = Analyte not detected

Table C3-3
Cell 3 Groundwater Analytical Results

Sample ID		CO194-MWS		CO196-MWS		CO198-MWS		CO201-MWS		CO30-PZM060
Quarter		Q2	Q4	Q2	Q4	Q2	Q4	Q2	Q4	Q2
Event Date		5/24/2021	12/8/2021	5/24/2021	12/8/2021	5/25/2021	12/8/2021	5/24/2021	12/8/2021	5/24/2021
Volatile Organic Compounds	**Units**									
Benzene	µg/L	**800**	**944**	**24,400**	**16,500**	**677**	**697**	**2,420**	**13,900**	**9.2**
Ethylbenzene	µg/L	**4.5 J**	**5 J**	**26.7**	**21.8**	**5.4**	**5.7**	**5.3**	**19.7**	**1.9**
Toluene	µg/L	**108**	**144**	**1,370**	**1,080**	**115**	**129**	**266**	**904**	**23.3**
Xylenes	µg/L	**60.4**	**73.9**	**329**	**240**	**62.5**	**66.1**	**93.1**	**245**	**11.2**
Total Volatile Organics	µg/L	**968**	**1,162**	**26,126**	**17,842**	**860**	**898**	**2,784**	**15,069**	**46**
Semi-Volatile Organic Compounds	**Units**									
Naphthalene	µg/L	**2,240**	**3,260**	**591**	**969**	**5,590**	**3,490**	**276**	**702**	**1.3 J**

Notes:

Bold = Analyte Detected
NS = Not Sampled
µg/L = Micrograms per liter
U = Analyte not detected

Table C4-1
Cell 4 DNAPL Occurrence and Recovery

Well ID	Total DNAPL Recovery Period		Pre-2021		Estimated DNAPL Recovered 2021		Cumulative Total DNAPL Recovered	
	Begin	End	(gal)	(lbs)[1]	(gal)	(lbs)[1]	(gal)	(lbs)[1]
CO123	1-Jan-16	On-going[2]	608	5,835	27.0	259	635	6,094
CO124	1-Jan-16	On-going[2]	607	5,826	15.0	144	622	5,969
CO125	1-Jan-16	On-going[2]	205.0	1967	30.0	288	235	2,255
CO169	1-Jan-16	On-going	50.0	480	0	0	50	480
Total Recovery:			**1,470**	**14,108**	**72**	**691**	**1,542**	**14,799**

Notes:

[1] Weight is calculated based on oil density of 1.15 grams per cubic centimeter.
[2] Skimmer

Table C5-1
Cell 5 Monitoring 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
CO23-PZM008	----------	Hollow Stem Auger	561783.979	1457095.859	11.17	Flush Mount	19	9	10
CO24-PZM007	----------	Hollow Stem Auger	562048.175	1457276.816	12.02	Flush Mount	19	9	10
CO26-PZM007	----------	Hollow Stem Auger	561682.425	1458048.048	12.76	Flush Mount	20	10	10
CO55-PZM000	Cell 5 - MW1 (S)	Hollow Stem Auger	561434.420	1457585.900	15.10	Steel Riser	15	5	10
CO56-PZP001	Cell 5 - MW2 (S)	Hollow Stem Auger	561668.410	1457790.050	15.92	Steel Riser	15	5	10
CO57-PZP002	Cell 5 - MW3 (S)	Hollow Stem Auger	561122.520	1457530.000	16.59	Steel Riser	15	5	10
CO58-PZM001	Cell 5 - MW4 (S)	Hollow Stem Auger	561331.310	1457989.130	14.31	Steel Riser	15	5	10
CO59-PZP002	Cell 5 - MW5 (S)	Hollow Stem Auger	561446.980	1457308.790	16.75	Steel Riser	15	5	10
CO60-PZP001	Cell 5 - MW6 (S)	Hollow Stem Auger	561872.550	1457913.360	15.83	Steel Riser	15	5	10

Table C5-2: Summary of Operation
Cell 5: DPE System in Former Coke Oven Area

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	1,181,873	1,164,270	866,820	1,098,510	4,311,473
Total Operating Time	hours	1,653	2,107	1,441	1,275	6,476
Overall Operational Time	%	76.5%	96.5%	65.2%	57.7%	74.0%
Extracted Total Concentrations	lbs/gal	3.97E-05	4.82E-05	4.80E-05	4.77E-05	1.84E-04
Effluent Total Concentrations	lbs/gal	0	0.00E+00	0.00E+00	1.39E-08	1.39E-08
Extracted Hydrocarbons	lbs	47	56	41.6	52.4	197
Effluent Hydrocarbons	lbs	0.00	0.00	0.00	0.02	0.02
Total Hydrocarbons Removed	lbs	47	56	41.6	52.4	197

Table C5-3
Cell 5 Monitoring Well Groundwater Elevations

Well ID	Temporary Well ID	Top of PVC Elevation (ft)	Aquifer	Well Depth from Ground Surface (ft)	3/8/2021		6/1/2021		8/30/21 - 8/31/21		12/6/21 - 12/7/21	
					Depth to Groundwater	Groundwater Elevation (ft)	Depth to Groundwater	Groundwater Elevation (ft)	Depth to Groundwater	Groundwater Elevation (ft)	Depth to Groundwater	Groundwater Elevation (ft)
CO23-PZM008		15.74	Shallow	19.00	14.88	0.86	15.13	0.61	14.55	1.19	15.28	0.46
CO24-PZM007		15.95	Shallow	19.00	14.45	1.50	14.83	1.12	14.22	1.73	14.91	1.04
CO26-PZM007		12.76	Shallow	20.00	11.93	0.83	12.10	0.66	11.45	1.31	11.88	0.88
CO55-PZM000	Cell 5 - MW1 (S)	15.10	Shallow	15.00	14.42	0.68	14.69	0.41	14.02	1.08	16.10	-1.00
CO56-PZP001	Cell 5 - MW2 (S)	15.92	Shallow	15.00	15.24	0.68	15.39	0.53	14.81	1.11	15.61	0.31
CO57-PZP002	Cell 5 - MW3 (S)	16.59	Shallow	15.00	NM	NM	NM	NM	15.31	1.28	16.33	0.26
CO58-PZM001	Cell 5 - MW4 (S)	14.31	Shallow	15.00	13.71	0.60	13.71	0.6	13.20	1.11	16.30	-1.99
CO59-PZP002	Cell 5 - MW5 (S)	16.75	Shallow	15.00	NM	NM	NM	NM	NM	NM	16.29	0.46
CO60-PZP001	Cell 5 - MW6 (S)	15.83	Shallow	15.00	15.17	0.66	15.35	0.48	14.71	1.12	15.51	0.32

Note: NM = Not Measured

Table C5-4
Cell 5 Groundwater Analytical Results

Sample ID		CO23-PZM008				CO24-PZM007			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/10/2021	5/25/2021	9/7/2021	12/2/2021	3/10/2021	5/25/2021	9/7/2021	12/2/2021
Volatile Organic Compounds	**Units**								
Benzene	µg/L	**489**	**567**	**377**	**606**	**2.2**	**2.9**	**2.3**	**2.3**
Ethylbenzene	µg/L	**25**	**31.5**	**23.3**	**32.6**	**2.8**	**1.9**	**3.6**	**2.1**
Toluene	µg/L	**293**	**357**	**217**	**343**	**1.4**	**1.9**	**1.4**	**1.4**
Xylenes	µg/L	**434**	**539**	**374**	**525**	**4.3**	**3.5**	**4.3**	**3**
Semi-Volatile Organic Compounds	**Units**								
Naphthalene	µg/L	**4,090**	**2,770**	**4,450**	**4,120**	**3,780**	**1,320**	**6,510**	**2,390**

Notes:

Bold = Analyte Detected
NS = Not Sampled
µg/L = Micrograms per liter
U = Analyte not detected above reporting limit
Naphthalene values included in total

Table C5-4
Cell 5 Groundwater Analytical Results

Sample ID		CO26-PZM007				CO55-PZM000			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/11/2021	5/25/2021	9/8/2021	12/2/2021	3/11/2021	6/2/2021	9/8/2021	12/2/2021
Volatile Organic Compounds	**Units**								
Benzene	µg/L	**94.3**	**43.6**	**165**	**327**	*1 U*	*1 U*	**0.63 J**	**1.6**
Ethylbenzene	µg/L	**3.5**	**1.9**	**6**	**10.7**	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	**43.9**	**16.8**	**87**	**179**	*1 U*	*1 U*	**0.47 J**	**1.2**
Xylenes	µg/L	**74.7**	**42.4**	**153**	**250**	*3 U*	*3 U*	*3 U*	**1.5 J**
Semi-Volatile Organic Compounds	**Units**								
Naphthalene	µg/L	**966**	**409**	**1,840**	**2880**	*2 U*	**11.8**	**2.8**	**5.4**

Notes:

Bold = Analyte Detected
NS = Not Sampled
µg/L = Micrograms per liter
U = Analyte not detected above reporting limit
Naphthalene values included in total

Table C5-4
Cell 5 Groundwater Analytical Results

Sample ID		CO56-PZP001				CO57-PZP002			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/10/2021	6/2/2021	9/8/2021	12/1/2021	*NS*	*NS*	9/8/2021	12/7/2021
Volatile Organic Compounds	**Units**								
Benzene	µg/L	**237**	**208**	**244**	**300**	*NS*	*NS*	*1 U*	*1 U*
Ethylbenzene	µg/L	**9.4**	**8.5**	**7.5**	**10.4**	*NS*	*NS*	*1 U*	*1 U*
Toluene	µg/L	**129**	**108**	**73.1**	**91.6**	*NS*	*NS*	*1 U*	*1 U*
Xylenes	µg/L	**217**	**176**	**150**	**244**	*NS*	*NS*	*3 U*	*3 U*
Semi-Volatile Organic Compounds	**Units**								
Naphthalene	µg/L	**2,660**	**1,970**	**2,080**	**3,290**	*NS*	*NS*	*2 U*	*2 U*

Notes:

Bold = Analyte Detected
NS = Not Sampled
µg/L = Micrograms per liter
U = Analyte not detected above reporting limit
Naphthalene values included in total

Table C5-4
Cell 5 Groundwater Analytical Results

Sample ID		CO58-PZM001				CO59-PZP002			
Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Event Date		3/11/2021	6/3/2021	9/8/2021	12/2/2021	*NS*	6/28/2021	9/7/2021	12/7/2021
Volatile Organic Compounds	**Units**								
Benzene	µg/L	**81.2**	**122**	**57.5**	**177**	*NS*	*1 U*	**2.2**	**231**
Ethylbenzene	µg/L	**5.2**	**6.3**	**3.2**	**9.1**	*NS*	*1 U*	**0.48 J**	**11**
Toluene	µg/L	**20.2**	**27.8**	**10.4**	**55.4**	*NS*	*1 U*	**2.2**	**80.1**
Xylenes	µg/L	**74.8**	**101**	**41.6**	**142**	*NS*	*3 U*	**4.1**	**173**
Semi-Volatile Organic Compounds	**Units**								
Naphthalene	µg/L	**905**	**1,350**	**662**	**698**	*NS*	*2 U*	**2.8**	**852**

Notes:

Bold = Analyte Detected
NS = Not Sampled
µg/L = Micrograms per liter
U = Analyte not detected above reporting limit
Naphthalene values included in total

Table C5-4
Cell 5 Groundwater Analytical Results

Sample ID		CO60-PZP001			
Quarter		Q1	Q2	Q3	Q4
Event Date		3/11/2021	5/25/2021	9/8/2021	12/2/2021
Volatile Organic Compounds	**Units**				
Benzene	µg/L	**318**	**241**	**201**	**259**
Ethylbenzene	µg/L	**11**	**8.8**	**6.5**	**8**
Toluene	µg/L	**113**	**60.5**	**1650**	**37.8**
Xylenes	µg/L	**269**	**225**	**19.2**	**184**
Semi-Volatile Organic Compounds	**Units**				
Naphthalene	µg/L	**3990**	**2,320**	**164**	**2,670**

Notes:

Bold = Analyte Detected
NS = Not Sampled
µg/L = Micrograms per liter
U = Analyte not detected above reporting limit
Naphthalene values included in total

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

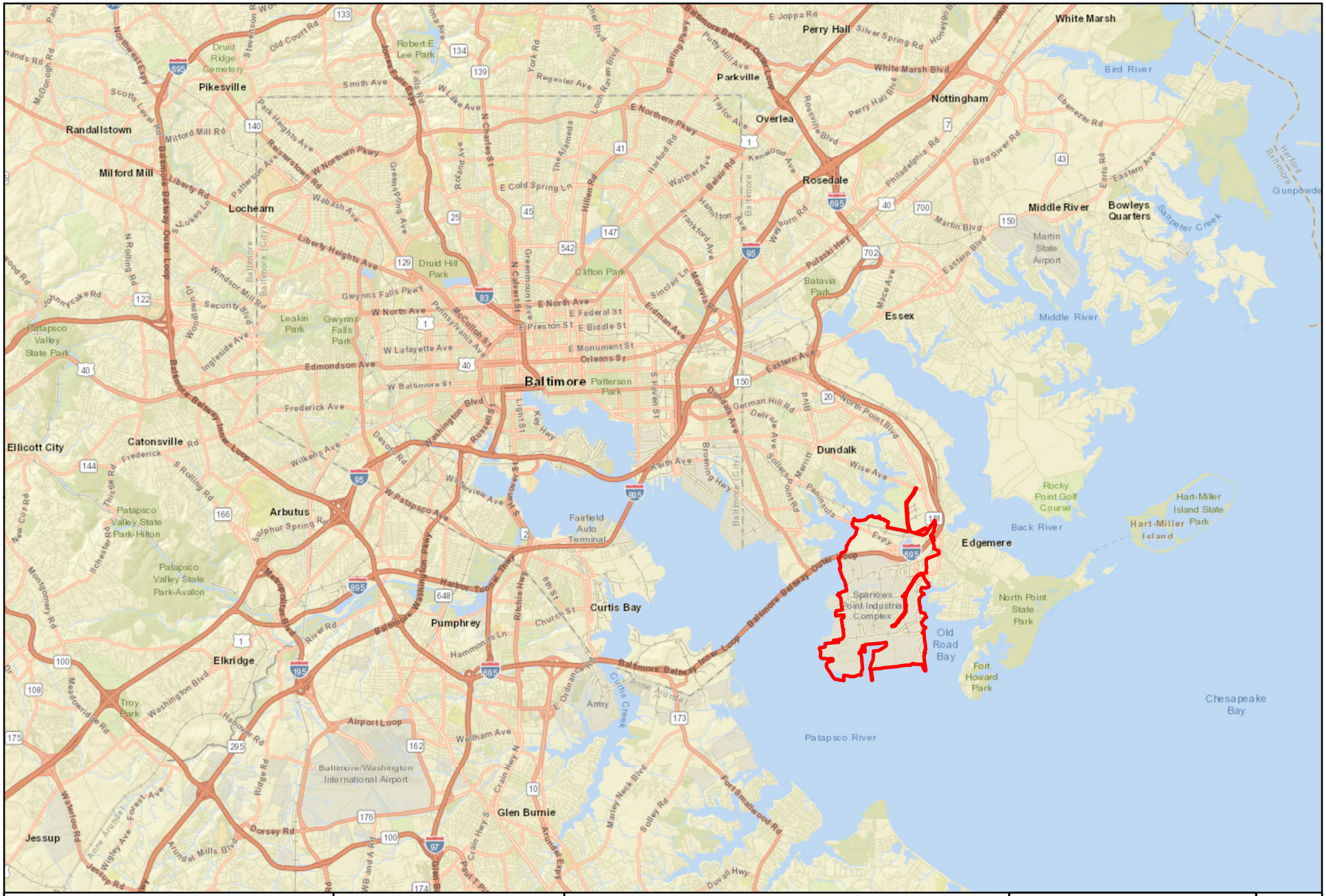
Method	Recovery Period		Pre-2021		LNAPL Recovered Q1		LNAPL Recovered Q2		LNAPL Recovered Q3		LNAPL Recovered Q4		Cumulative Total LNAPL Recovered	
	Begin	End	(gal)	(lbs)[1]	(gal)	(lbs)[1]	(gal)	(lbs)[1]	(gal)	(lbs)[1]	(gal)	(lbs)[1]	(gal)	(lbs)[1]
Manual Skimming and Bailing	7/23/2010	2019	16,162	118,435	0	0	0	0	0	0	0	0	16,162	118,435
CO173 Pneumatic Skimmer Pump	12/17/2019	On-going	4,673	34,244	420	3,078	335	2,455	395	2,895	317	2,323	6,140	44,994
MPE System	10/1/2016	On-going	7,153	52,417	0	0	0	0	490	3,591	0	0	7,643	56,008
	Total Recovery		**27,988**	**205,096**	**420**	**3,078**	**335**	**2,455**	**885**	**6,485**	**317**	**2,323**	**29,945**	**219,437**

Notes:

NR=Not Recorded; Q4 amount represents the total annual recovery amount

[1] 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.

FIGURES



N

ARM Group LLC
Engineers and Scientists

0 1.25 2.5 5 Miles

Property Boundary

Tradepoint Atlantic Regional Site View

January 19, 2021

Tradepoint Atlantic	Figure
Sparrows Point	1
Baltimore County, MD	

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



N

ARM Group LLC
Engineers and Scientists

1 inch = 500 feet

0 250 500
Feet

Former Coke Oven Area
Interim Measures Cell Locations

Date: 2/23/2022

Figure 2

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11.mxd



N

ARM Group LLC
Engineers and Scientists

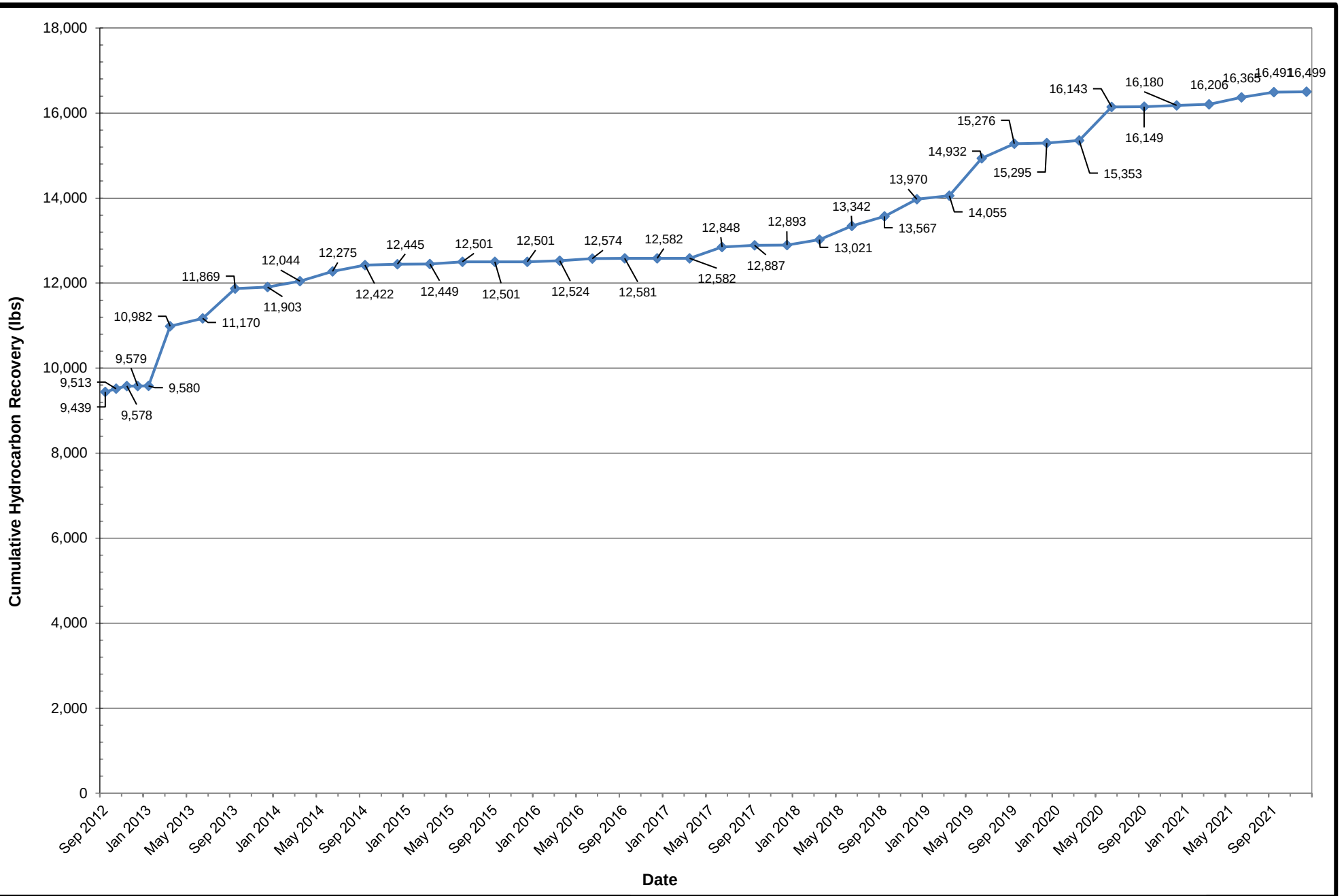
1 inch = 100 feet

0 50 100
Feet

Former Coke Oven Area
Cell 1 System Layout
AS/SVE
Date: 2/7/2022

Figure
C1-1

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11.mxd



ARM Group LLC
Engineers and Scientists

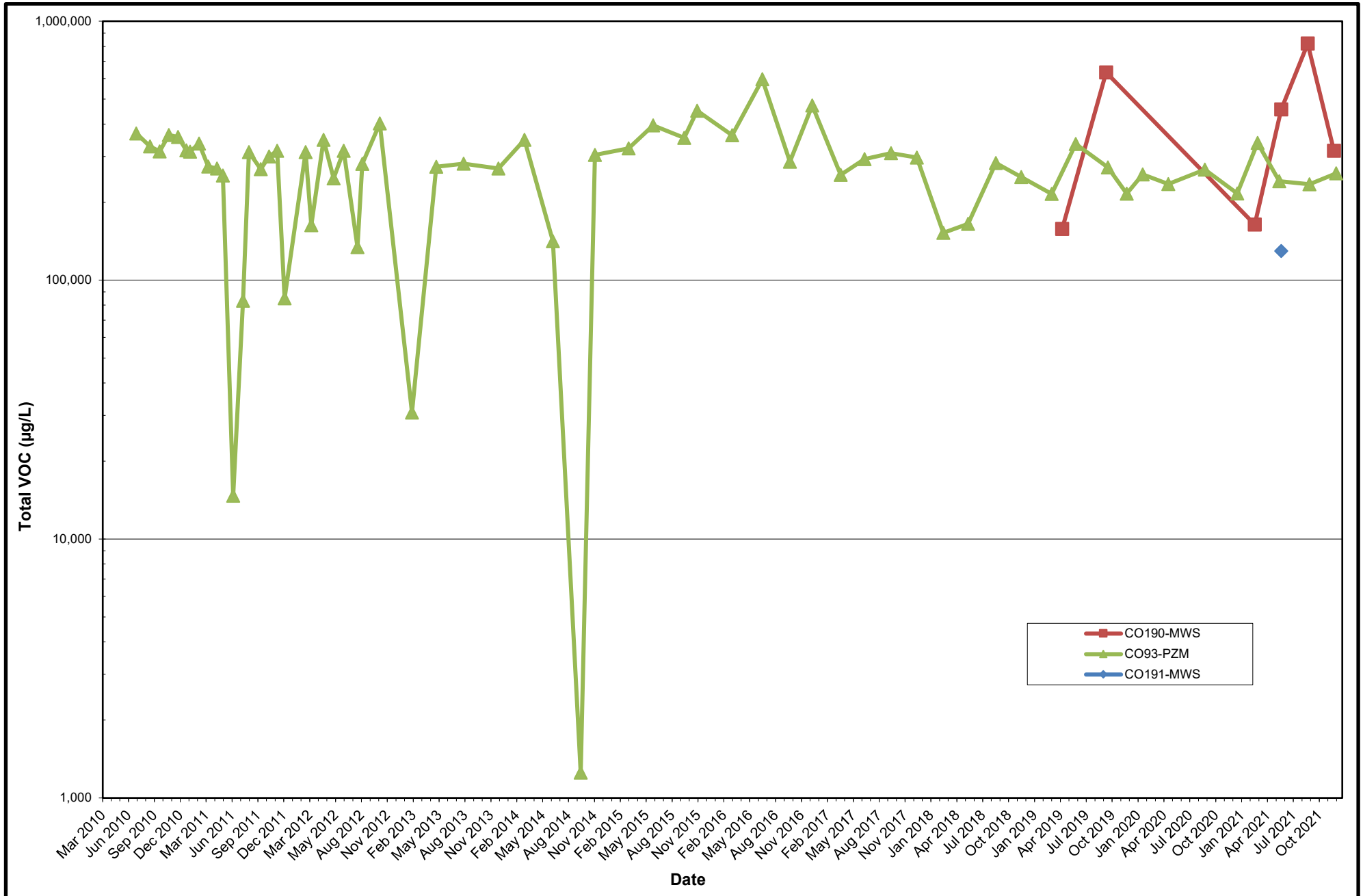
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Cumulative Hydrocarbon Recovery (lbs)
Cell 1

January 31, 2022

Figure
C1-2



ARM Group LLC
Engineers and Scientists

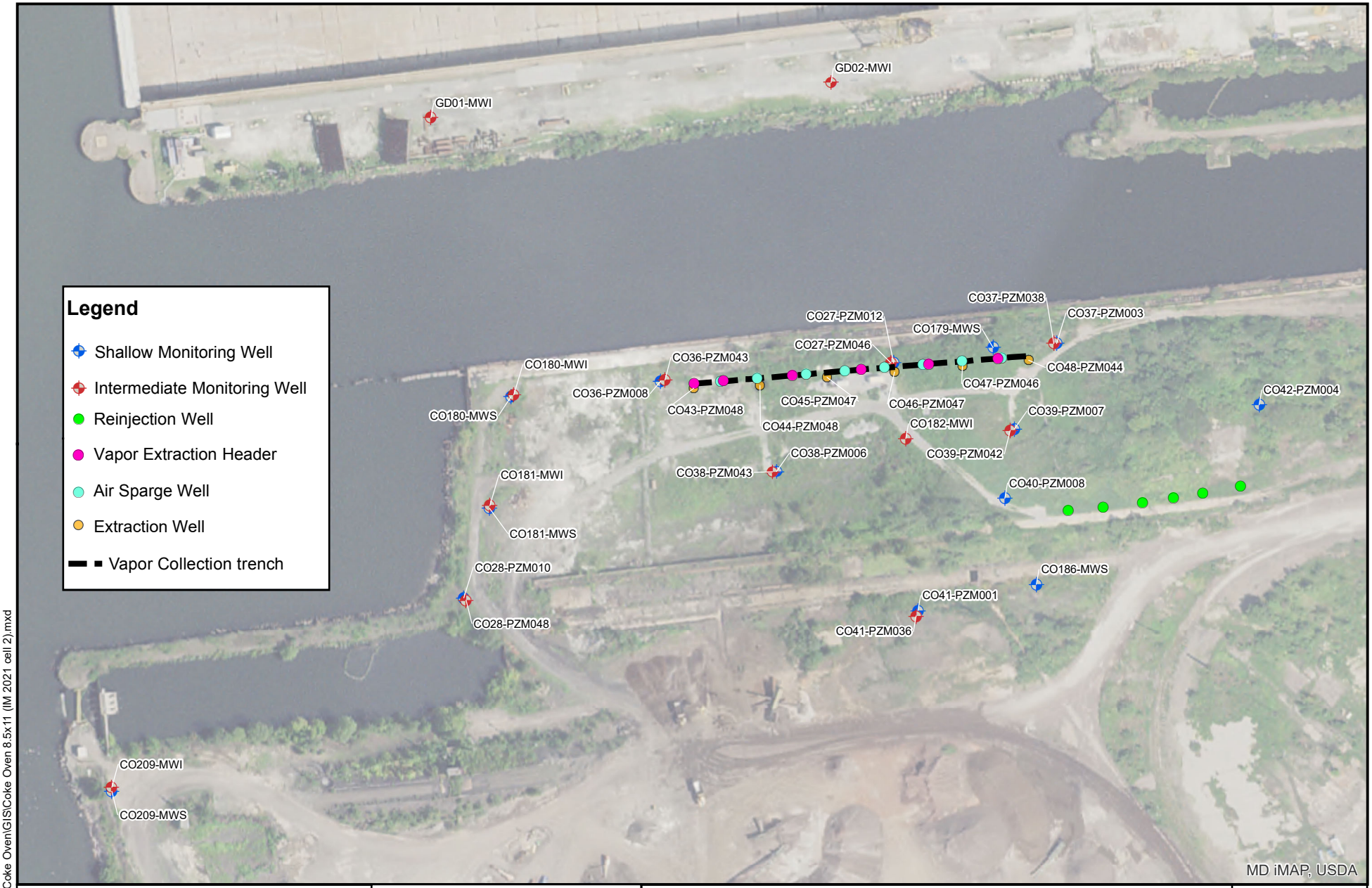
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Total VOCs in Groundwater
Cell 1 Shallow Zone

February 1, 2022

Figure
C1-3



N

ARM Group LLC
Engineers and Scientists

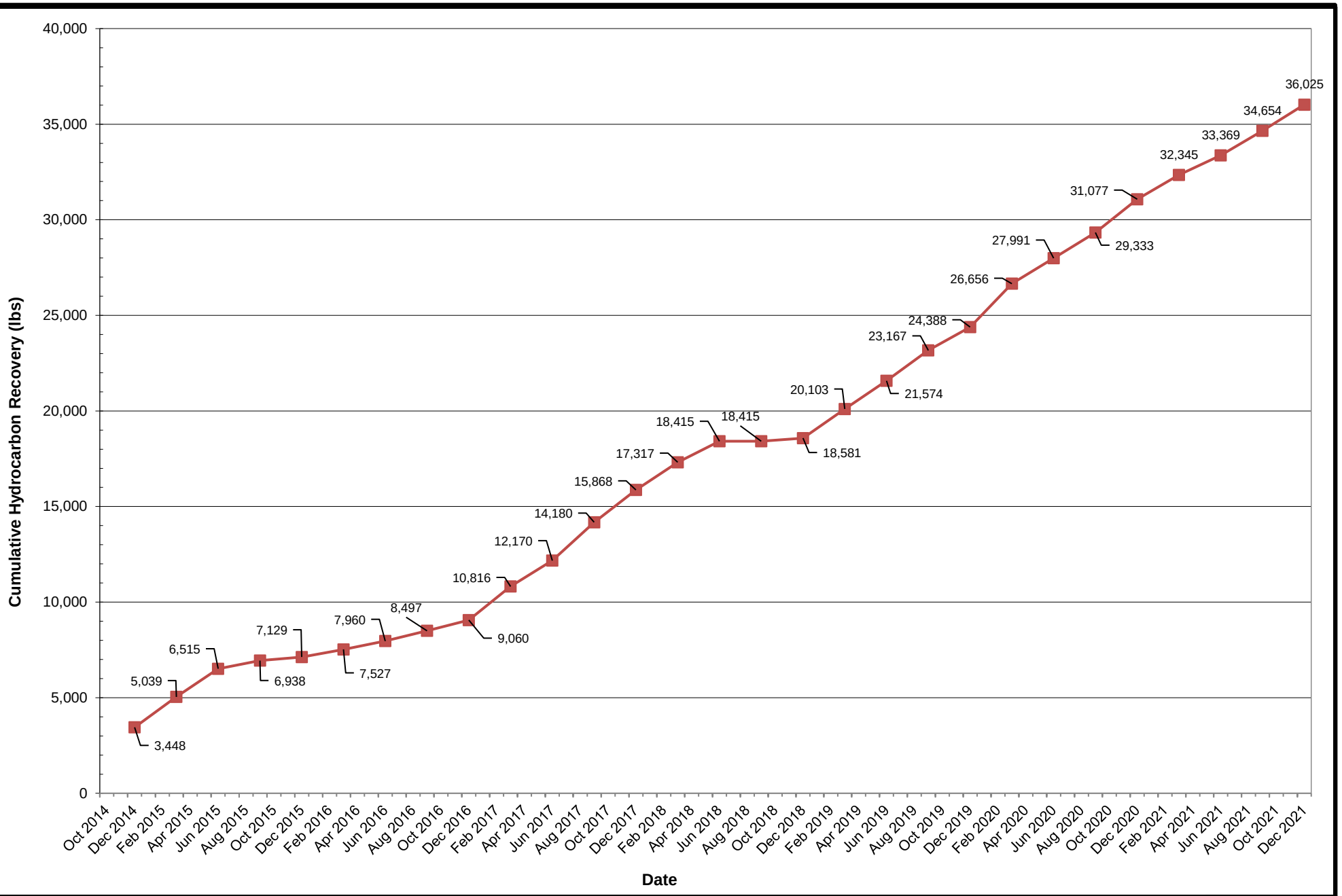
1 inch = 200 feet

0 100 200 Feet

Former Coke Oven Area
Cell 2 System Layout
AS/SVE and GW P&T
Date: 2/8/2022

Figure C2-1

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2).mxd



ARM Group LLC
Engineers and Scientists

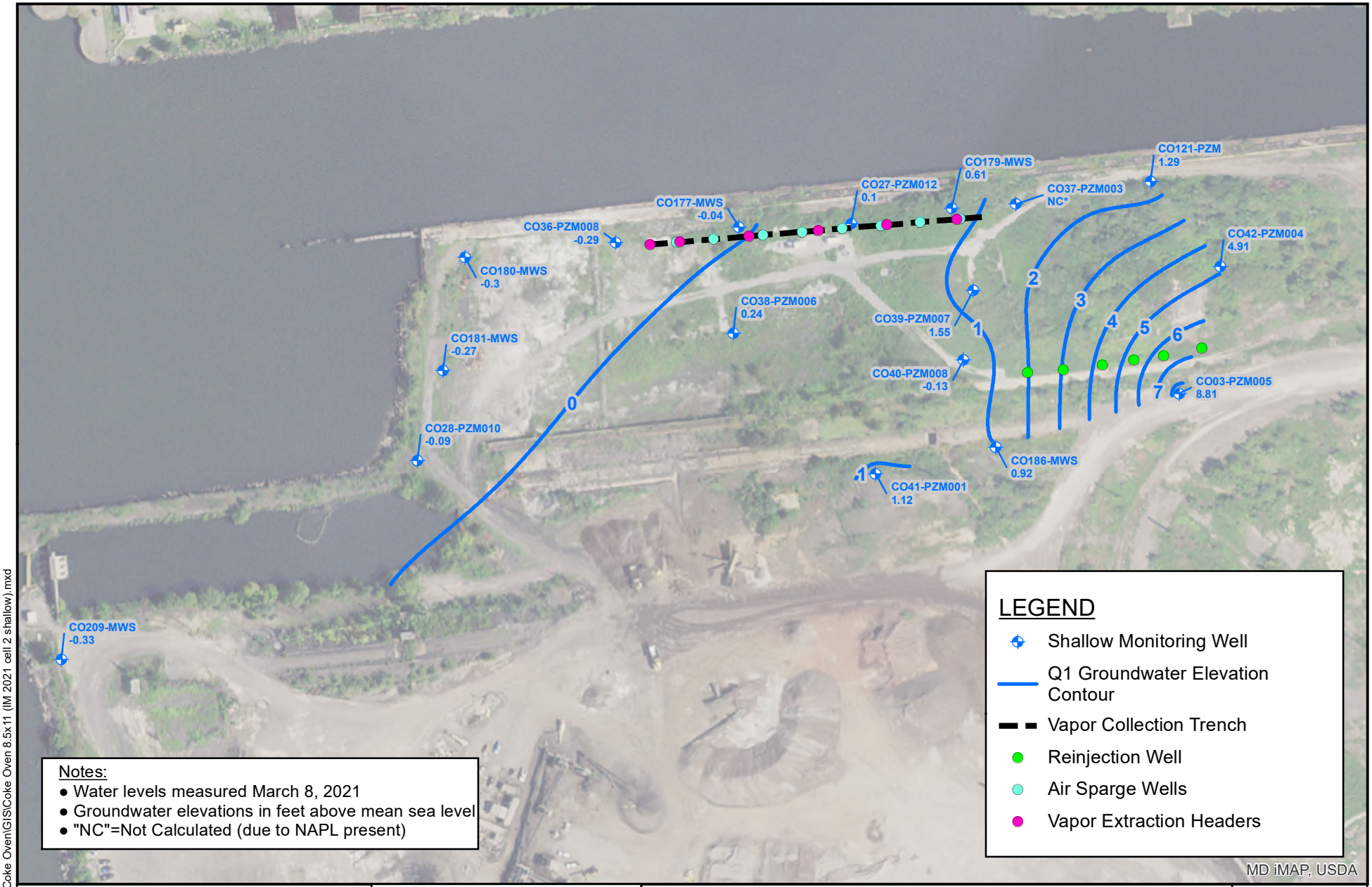
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Cumulative Hydrocarbon Recovery (lbs)
Cell 2

January 31, 2022

Figure
C2-2



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

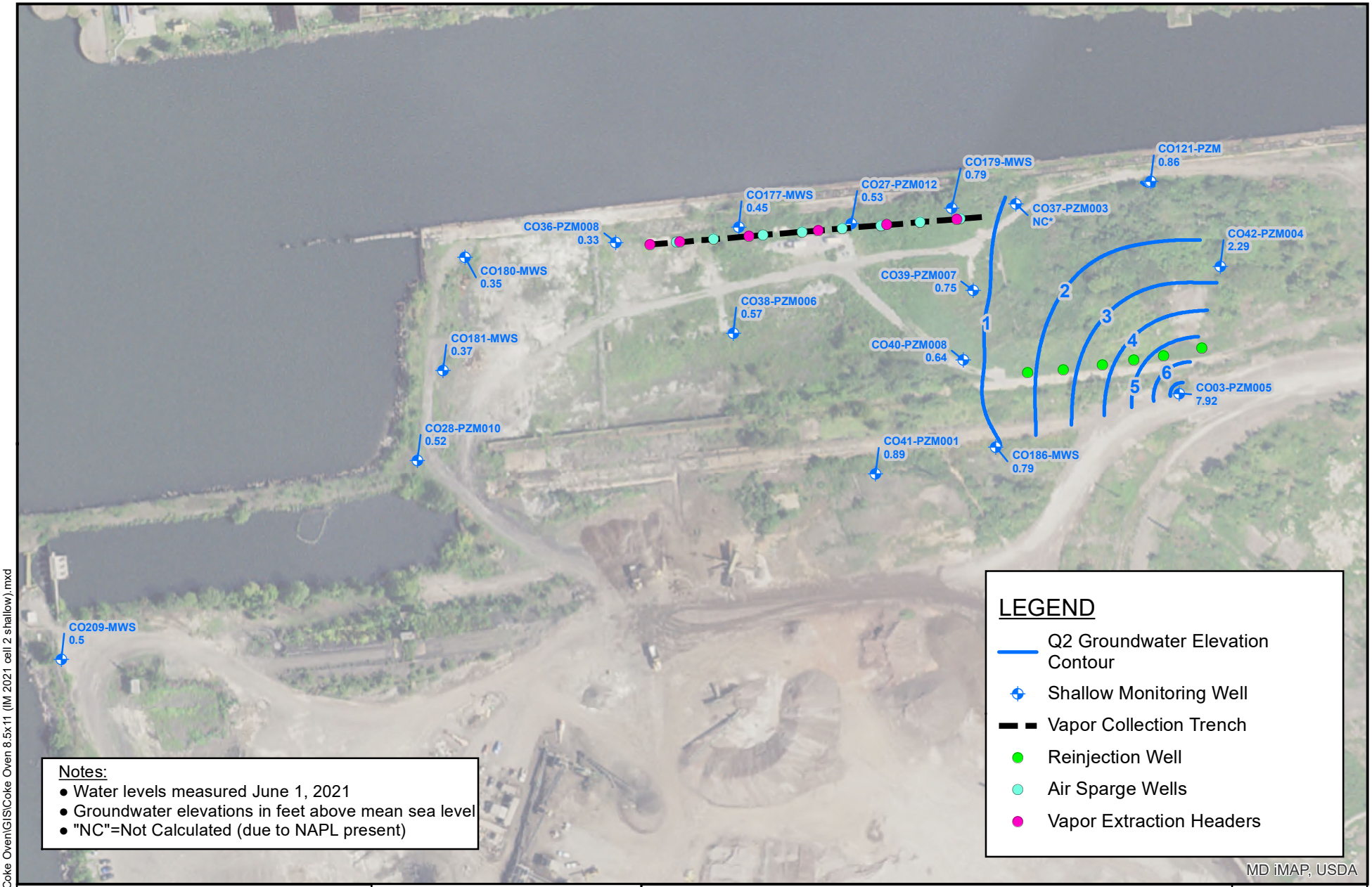
0 100 200 Feet

Former Coke Oven Area
Cell 2 Q1 Groundwater Elevation Contours Shallow Zone

Date: 2/11/2022

Figure C2-3

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 shallow).mxd



LEGEND

- Q2 Groundwater Elevation Contour
- Shallow Monitoring Well
- Vapor Collection Trench
- Reinjection Well
- Air Sparge Wells
- Vapor Extraction Headers

Notes:

- Water levels measured June 1, 2021
- Groundwater elevations in feet above mean sea level
- "NC"=Not Calculated (due to NAPL present)

N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

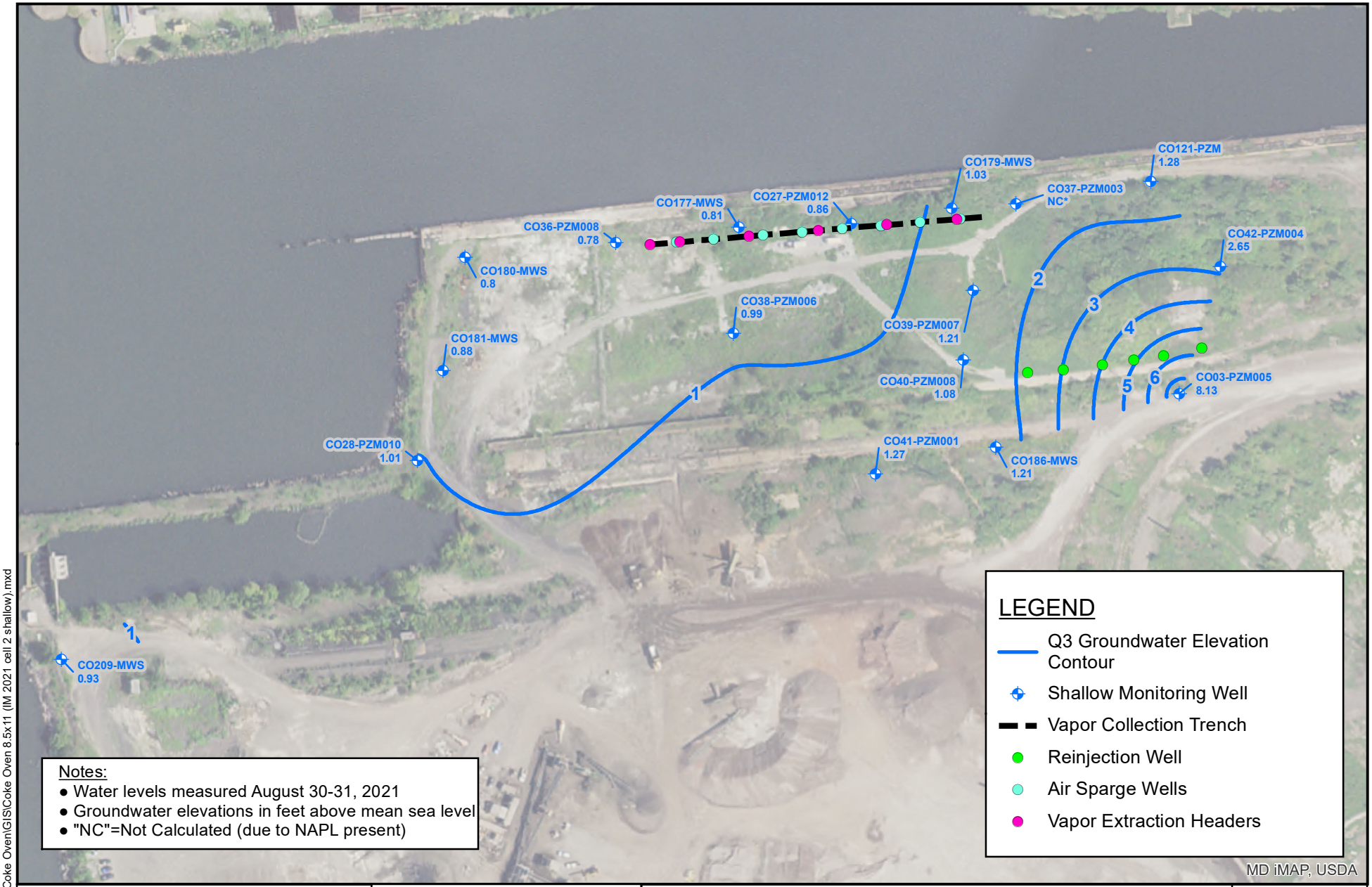
0 100 200 Feet

Former Coke Oven Area
Cell 2 Q2 Groundwater Elevation Contours Shallow Zone

Date: 2/11/2022

Figure C2-4

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 shallow).mxd



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

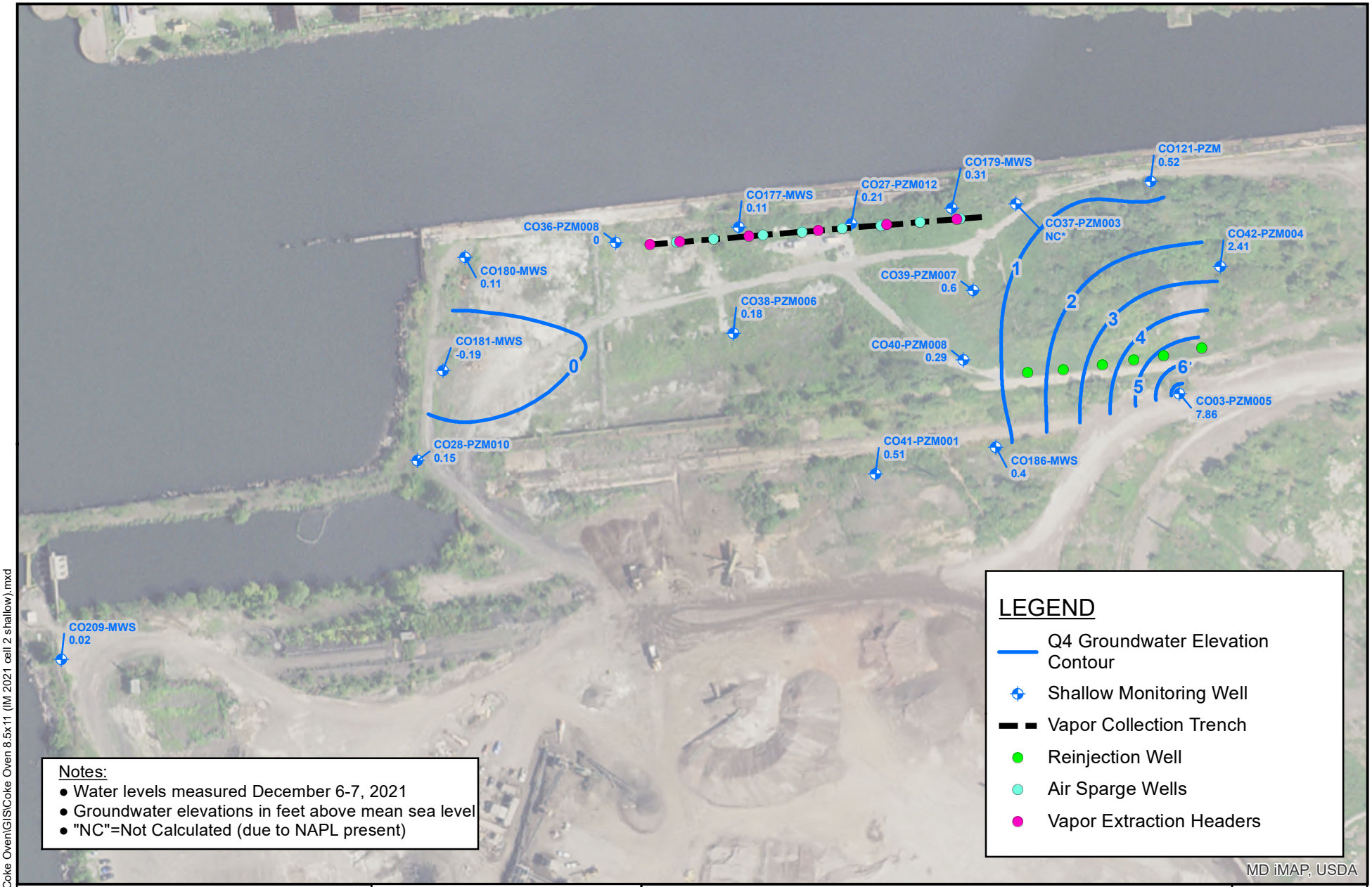
0 100 200 Feet

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

Date: 2/11/2022

Figure C2-5

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 shallow).mxd



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

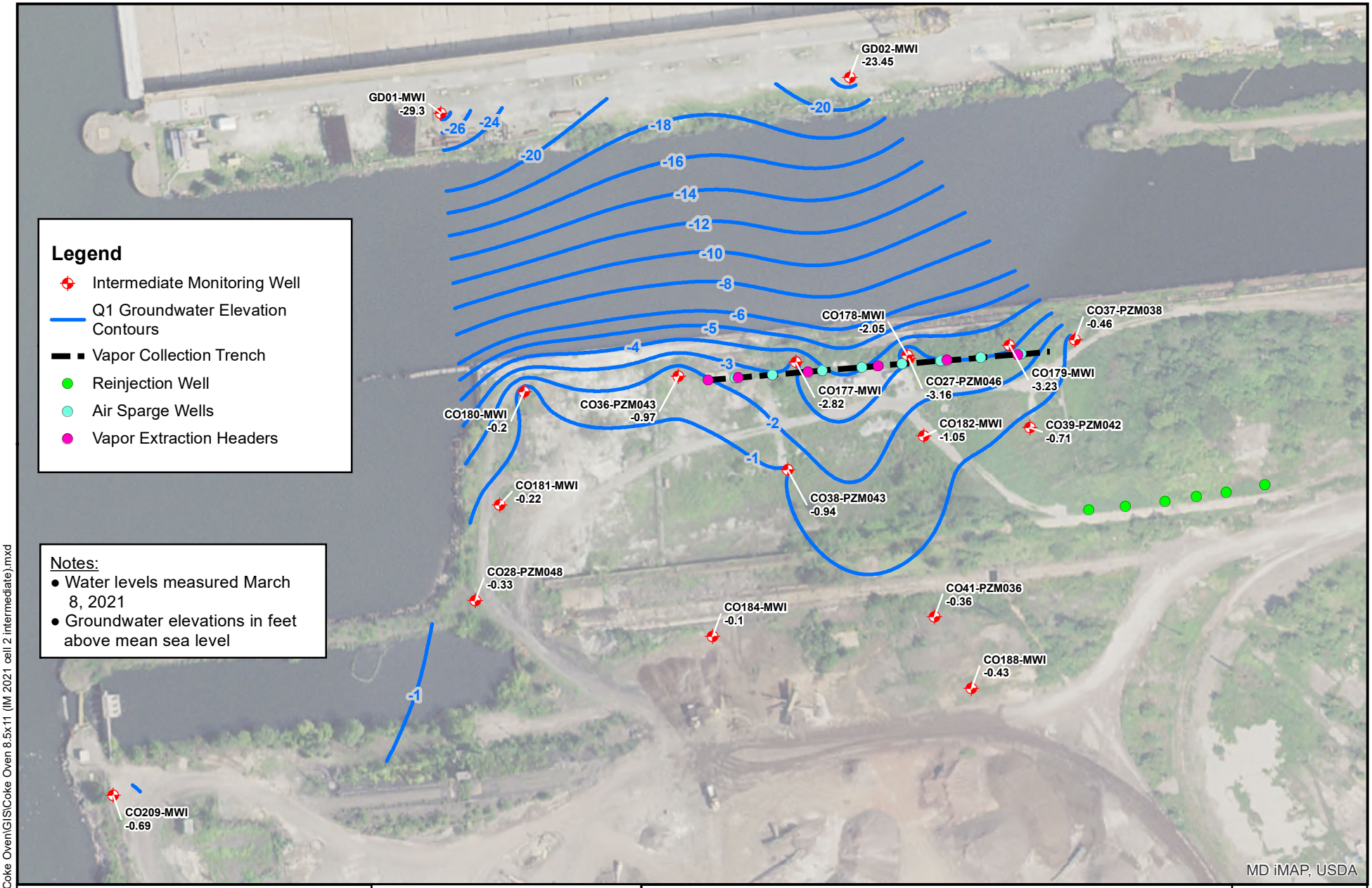
0 100 200 Feet

Former Coke Oven Area
Cell 2 Q4 Groundwater Elevation Contours Shallow Zone

Date: 2/11/2022

Figure C2-6

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 shallow).mxd



P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 intermediate).mxd

N

ARM Group LLC
Engineers and Scientists

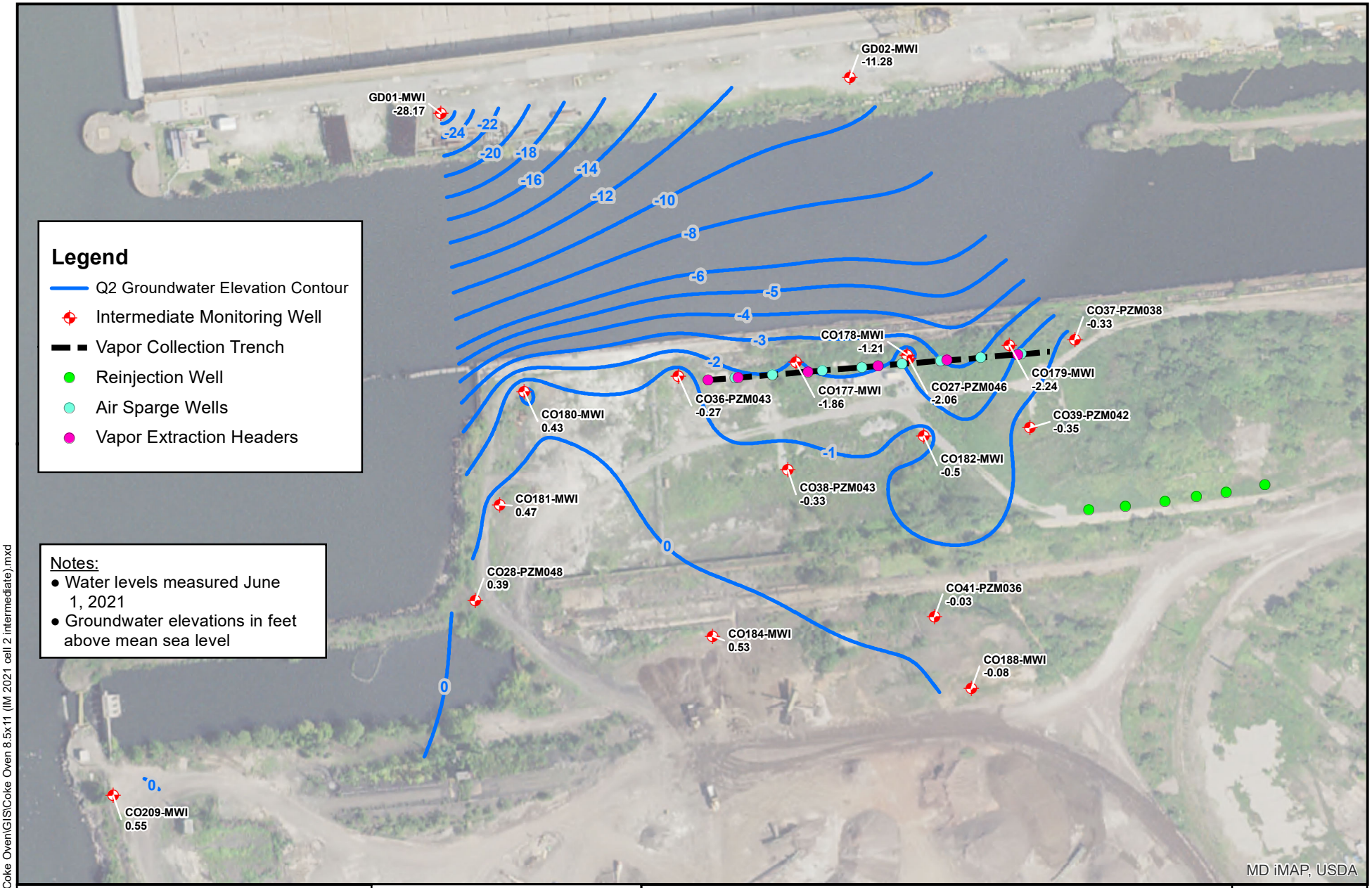
1 inch = 200 feet

0 100 200
Feet

Former Coke Oven Area
Cell 2 Q1 Groundwater Elevation Contours Intermediate Zone

Date: 2/11/2022

Figure
C2-7



N

ARM Group LLC
Engineers and Scientists

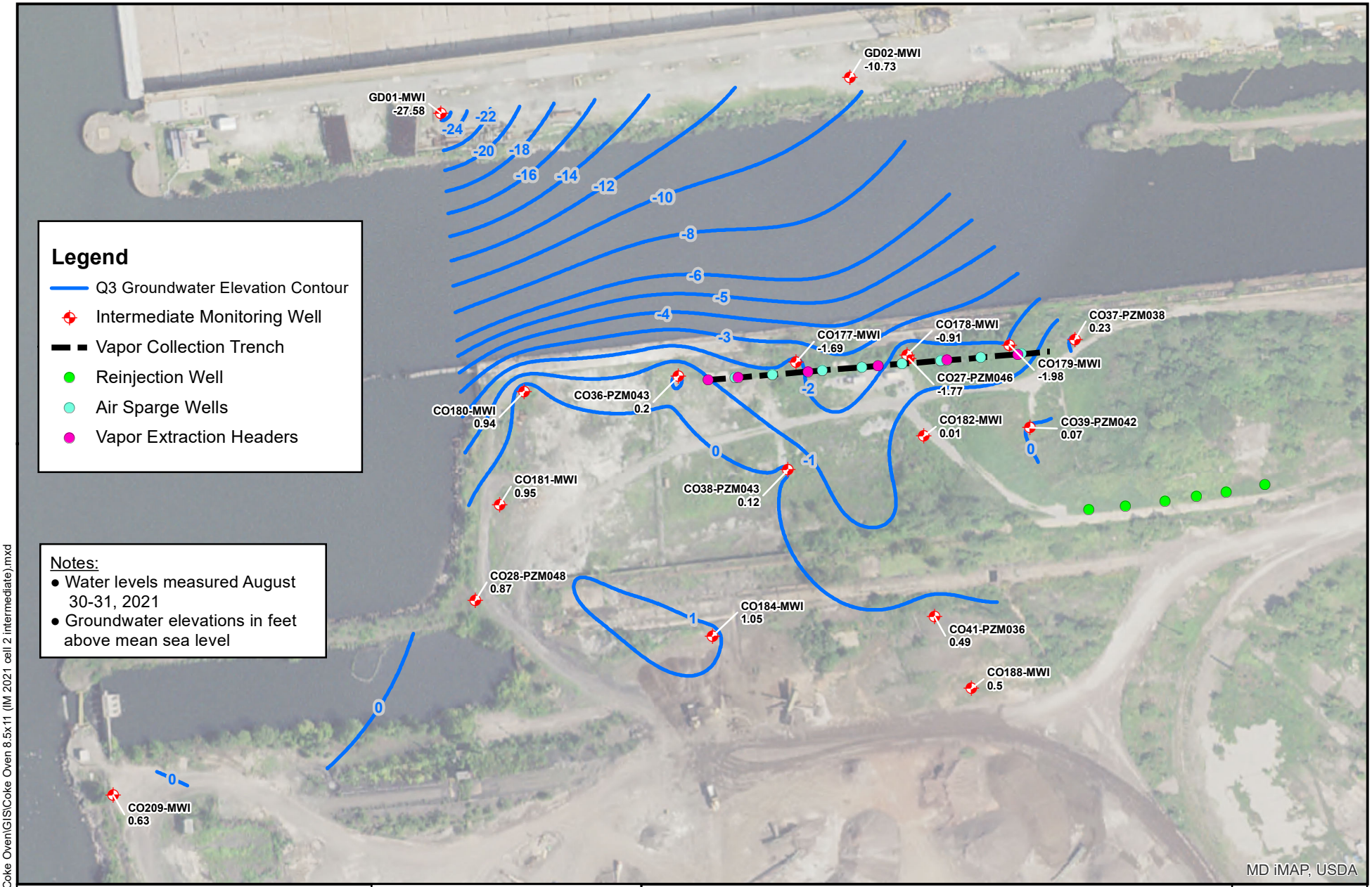
1 inch = 200 feet

0 100 200 Feet

Former Coke Oven Area
Cell 2 Q2 Groundwater Elevation Contours Intermediate Zone
Date: 2/11/2022

Figure C2-8

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 intermediate).mxd



Legend

- Q3 Groundwater Elevation Contour
- Intermediate Monitoring Well
- Vapor Collection Trench
- Reinjection Well
- Air Sparge Wells
- Vapor Extraction Headers

Notes:
- Water levels measured August 30-31, 2021
- Groundwater elevations in feet above mean sea level

N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

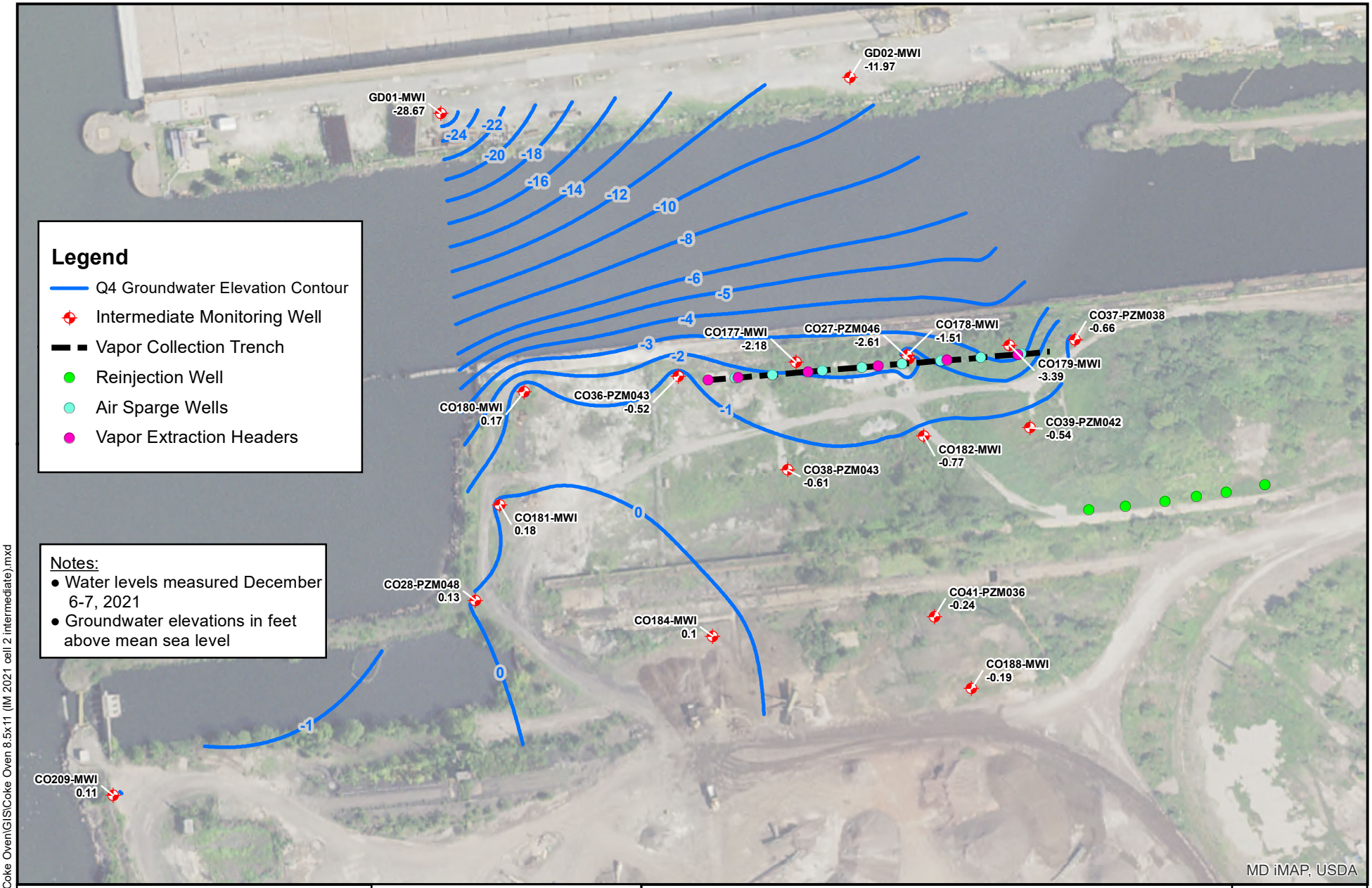
0 100 200 Feet

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

Date: 2/11/2022

Figure C2-9

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 intermediate).mxd



Legend

- Q4 Groundwater Elevation Contour
- Intermediate Monitoring Well
- Vapor Collection Trench
- Reinjection Well
- Air Sparge Wells
- Vapor Extraction Headers

Notes:

- Water levels measured December 6-7, 2021
- Groundwater elevations in feet above mean sea level

N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

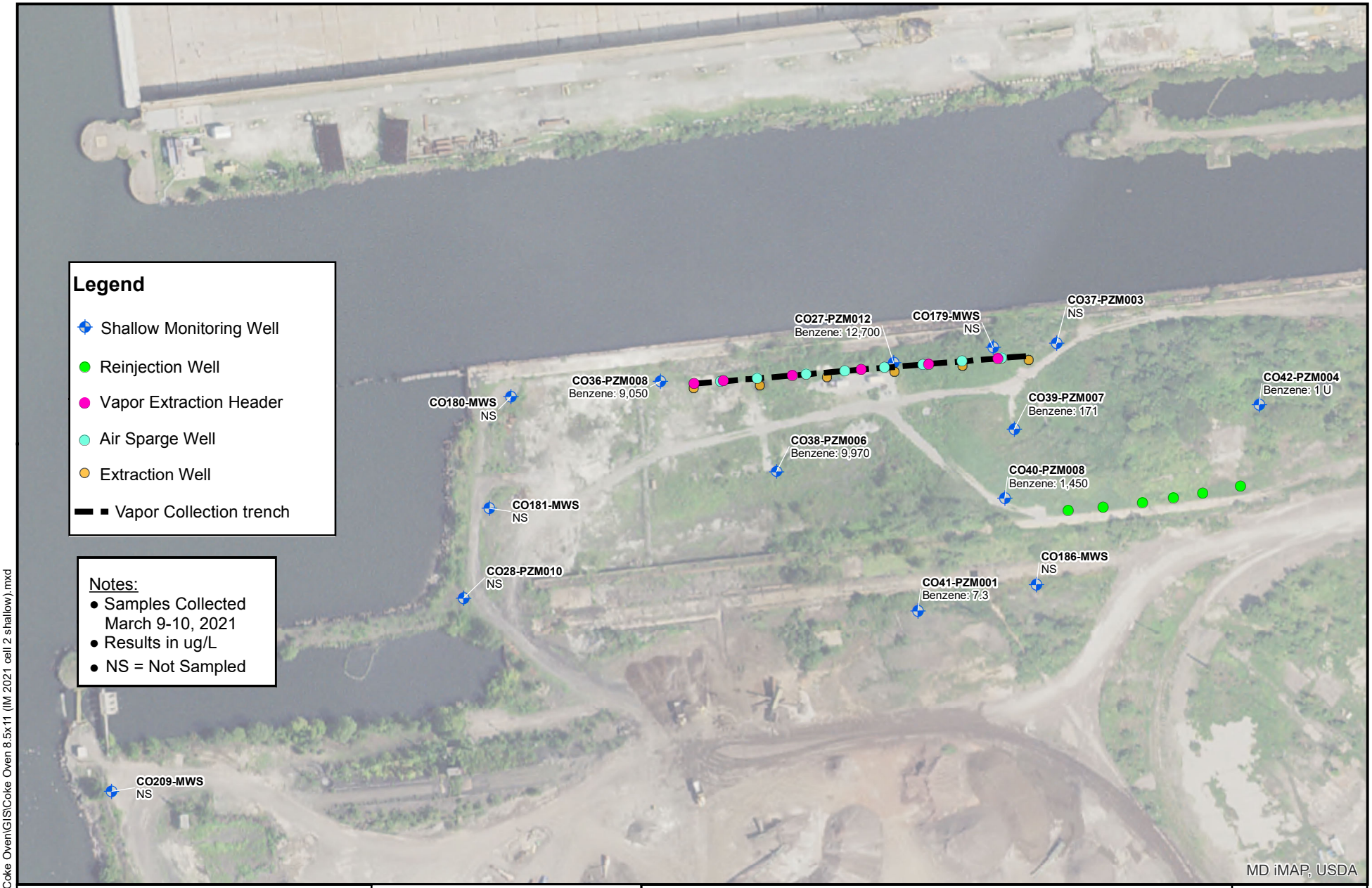
0 100 200 Feet

Former Coke Oven Area
Cell 2 Q4 Groundwater Elevation Contours Intermediate Zone

Date: 2/11/2022

Figure C2-10

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 intermediate).mxd



N

ARM Group LLC
Engineers and Scientists

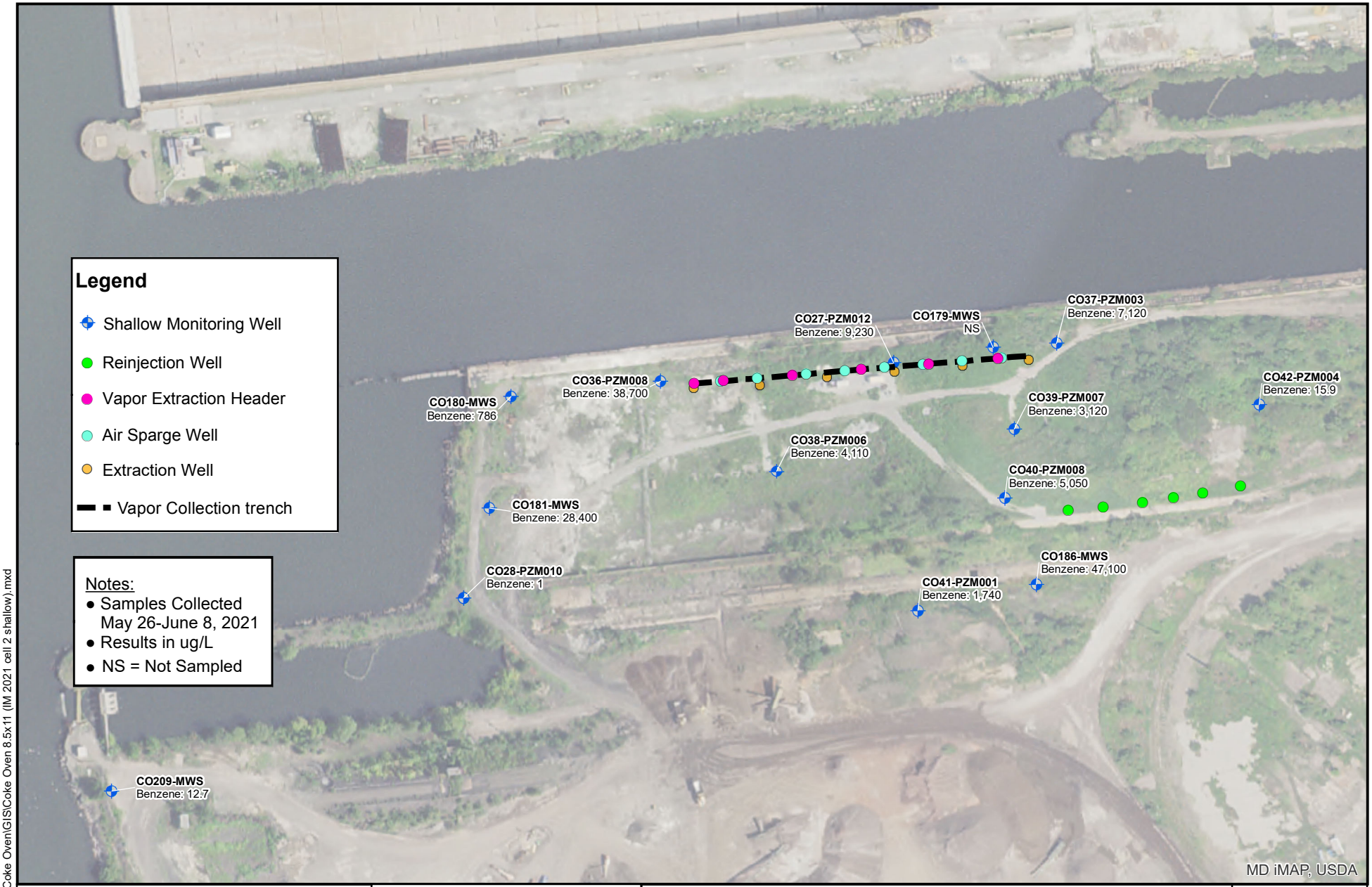
1 inch = 200 feet

0 100 200 Feet

Former Coke Oven Area
Cell 2 Q1 Benzene Concentrations
Shallow Zone
Date: 2/8/2022

Figure C2-11

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 shallow).mxd



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

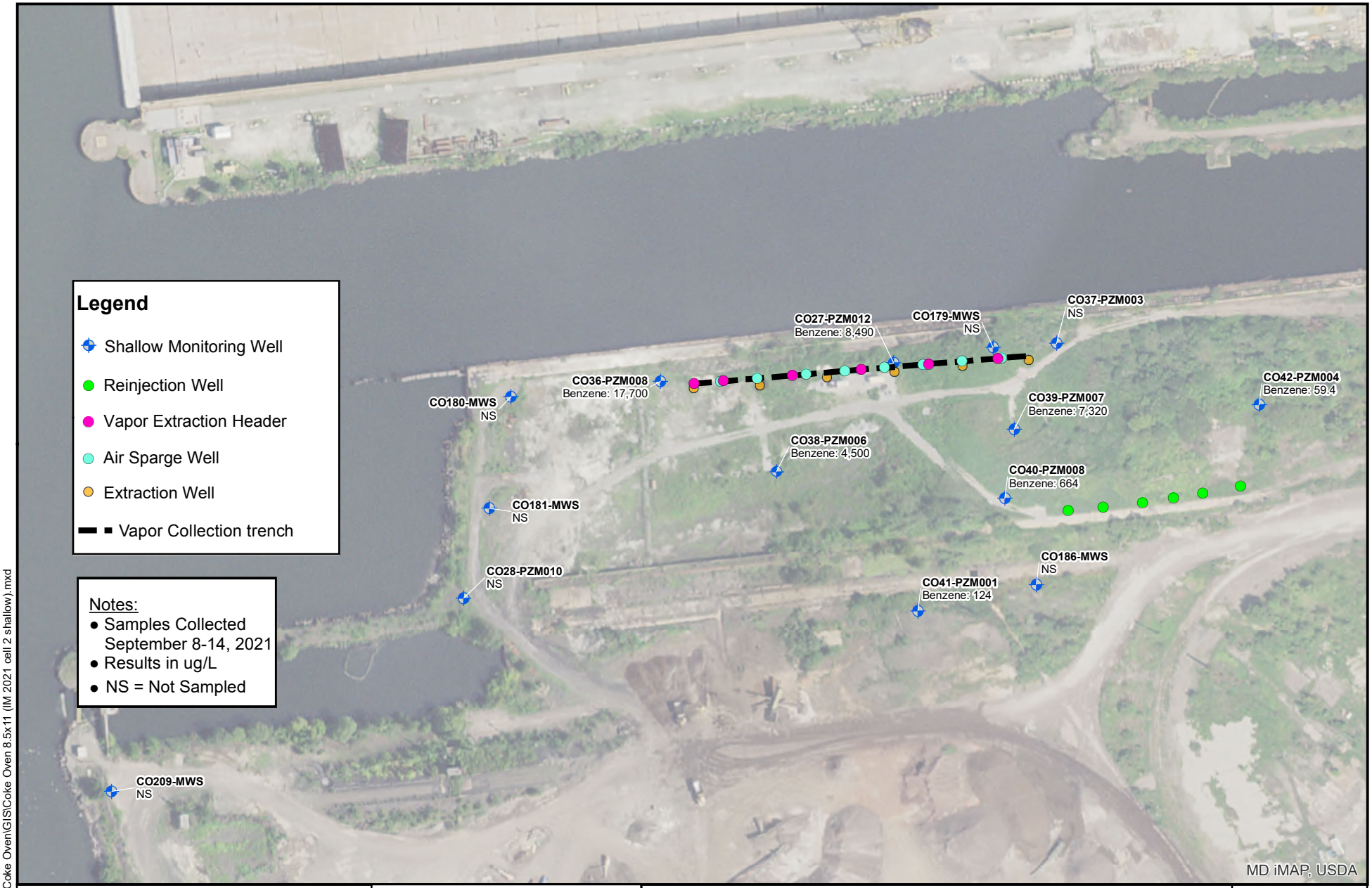
0 100 200 Feet

Former Coke Oven Area
Cell 2 Q2 Benzene Concentrations
Shallow Zone

Date: 2/8/2022

Figure C2-12

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 shallow).mxd



N

ARM Group LLC
Engineers and Scientists

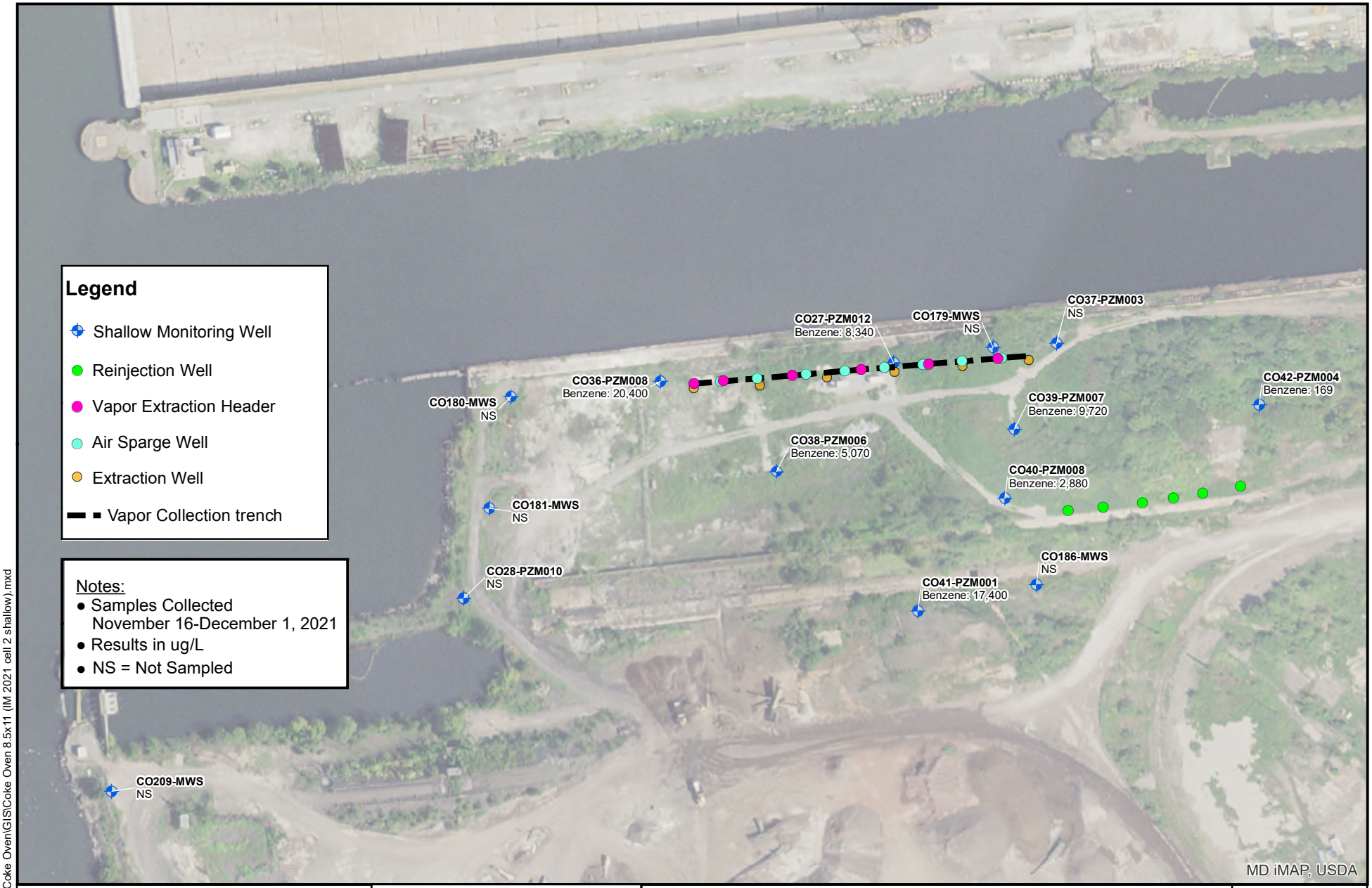
1 inch = 200 feet

0 100 200 Feet

Former Coke Oven Area
Cell 2 Q3 Benzene Concentrations
Shallow Zone
Date: 2/8/2022

Figure C2-13

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 shallow).mxd



N

ARM Group LLC
Engineers and Scientists

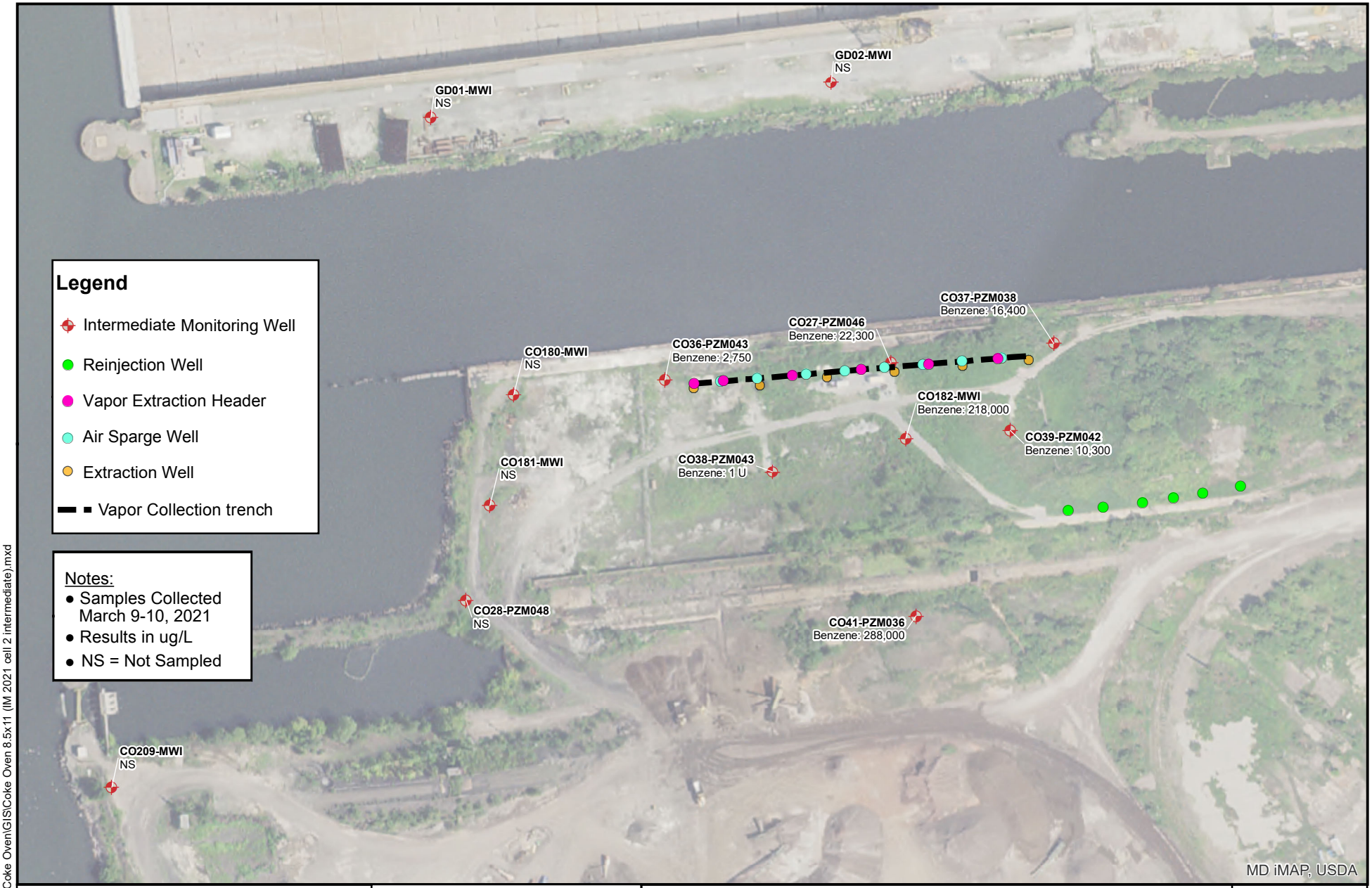
1 inch = 200 feet

0 100 200
Feet

Former Coke Oven Area
Cell 2 Q4 Benzene Concentrations
Shallow Zone
Date: 2/8/2022

Figure
C2-14

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 shallow).mxd



Legend

- Intermediate Monitoring Well
- Reinjection Well
- Vapor Extraction Header
- Air Sparge Well
- Extraction Well
- Vapor Collection trench

Notes:

- Samples Collected March 9-10, 2021
- Results in ug/L
- NS = Not Sampled

N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

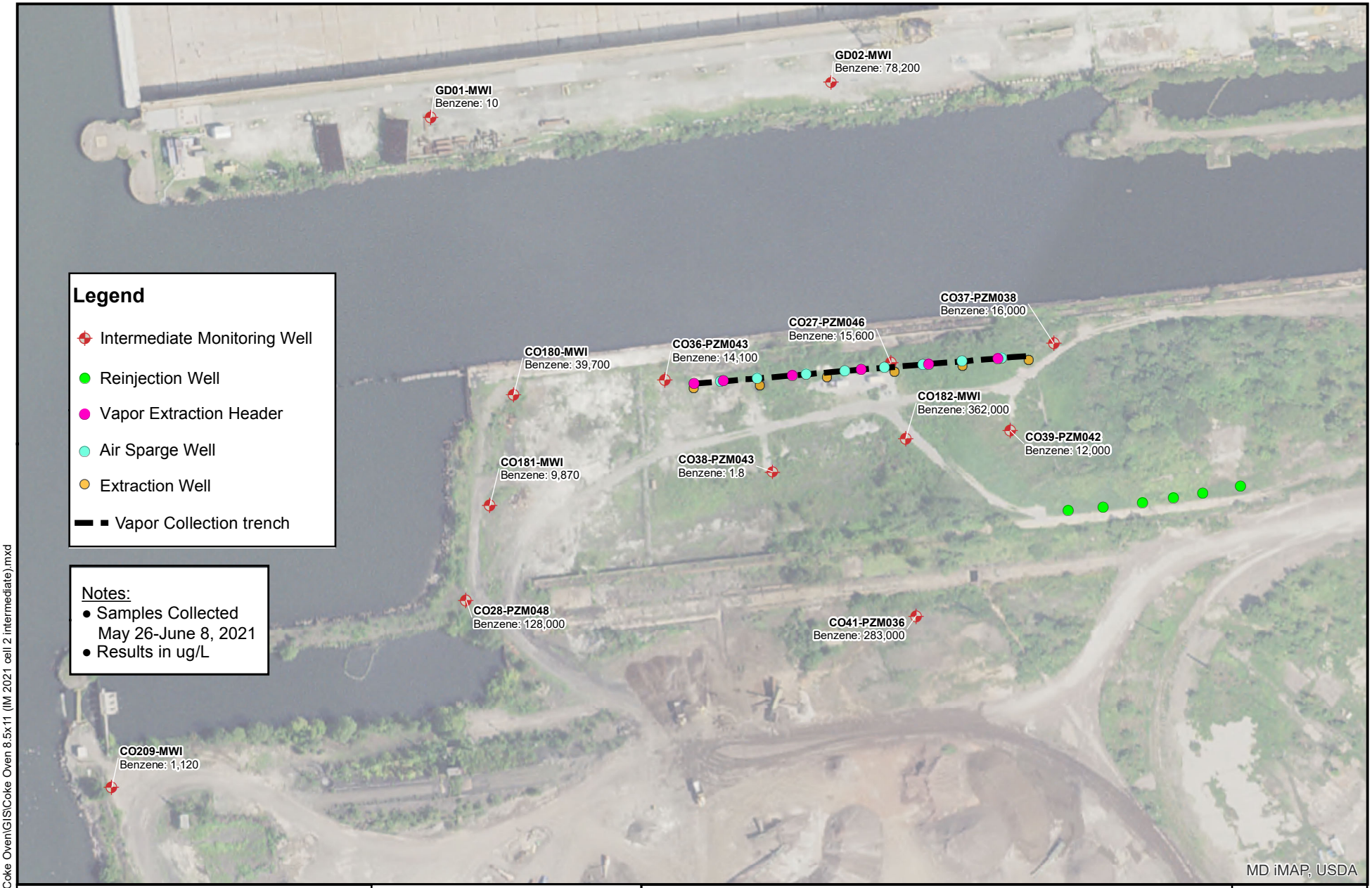
0 100 200 Feet

Former Coke Oven Area
Cell 2 Q1 Benzene Concentrations
Intermediate Zone

Date: 2/8/2022

Figure C2-15

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 intermediate).mxd



P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 intermediate).mxd

N

ARM Group LLC
Engineers and Scientists

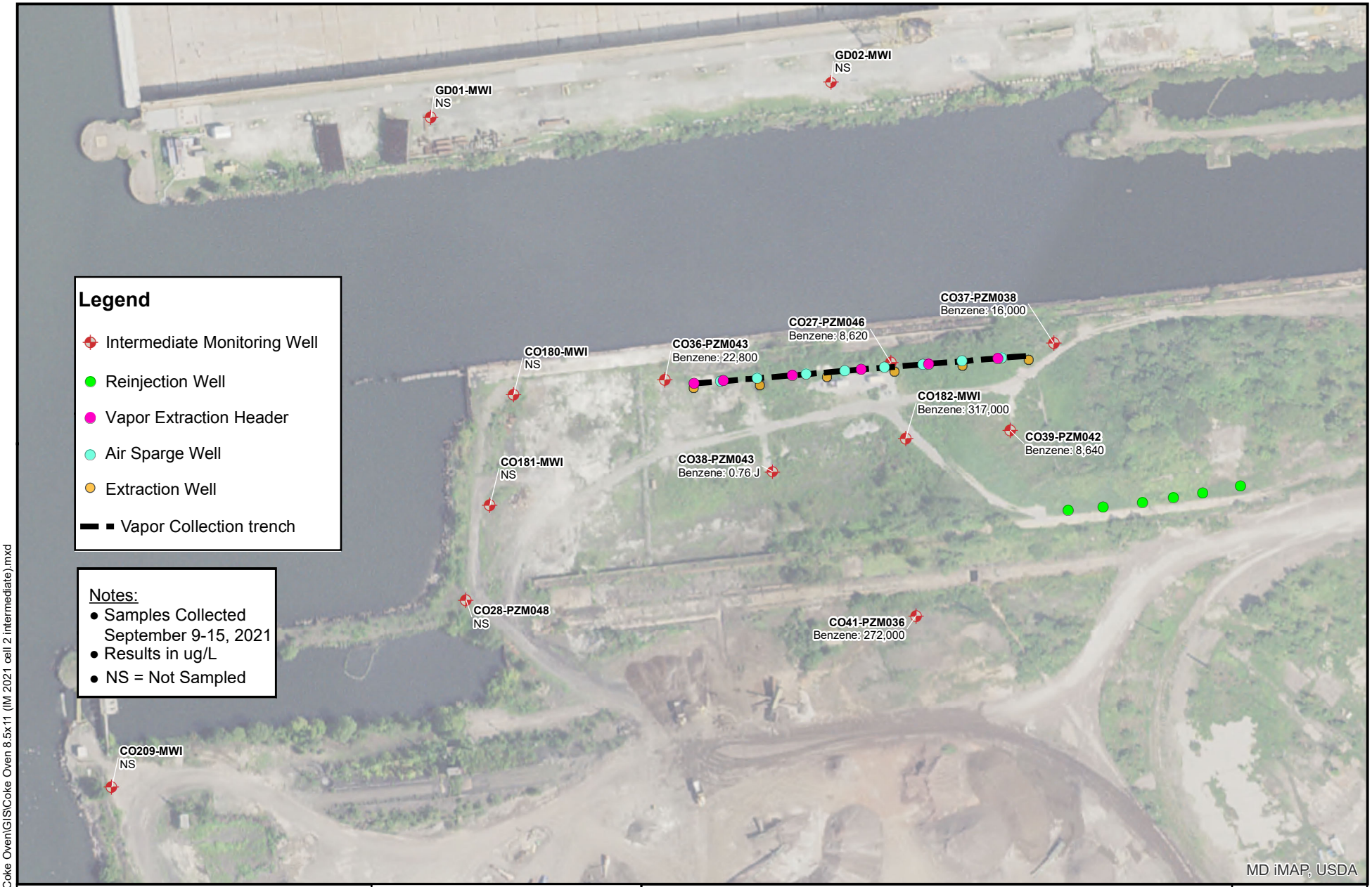
1 inch = 200 feet

0 100 200
Feet

Former Coke Oven Area
Cell 2 Q2 Benzene Concentrations
Intermediate Zone

Date: 2/8/2022

Figure
C2-16



P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 intermediate).mxd

N

ARM Group LLC
Engineers and Scientists

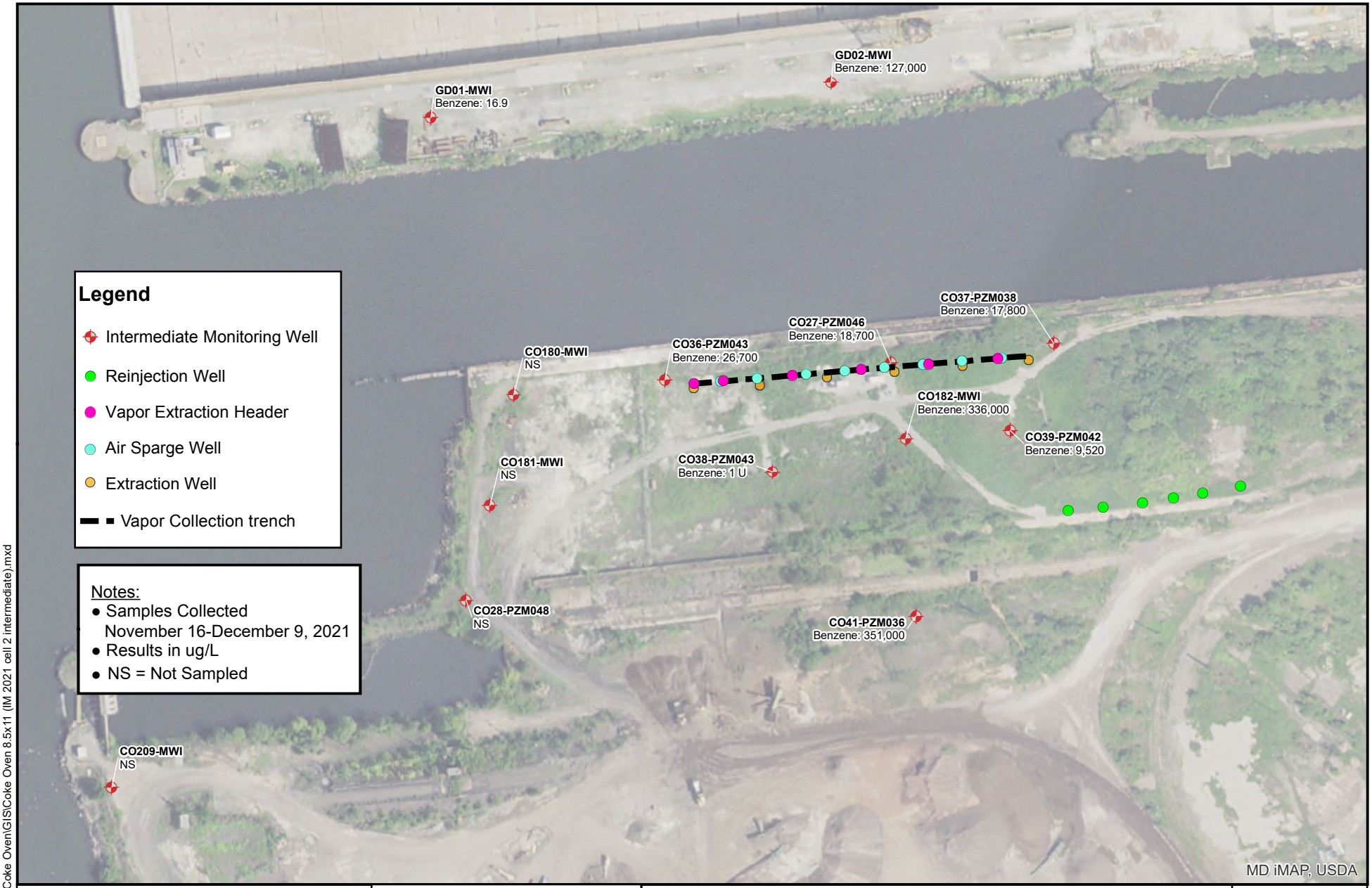
1 inch = 200 feet

0 100 200
Feet

Former Coke Oven Area
Cell 2 Q3 Benzene Concentrations
Intermediate Zone

Date: 2/8/2022

Figure
C2-17



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

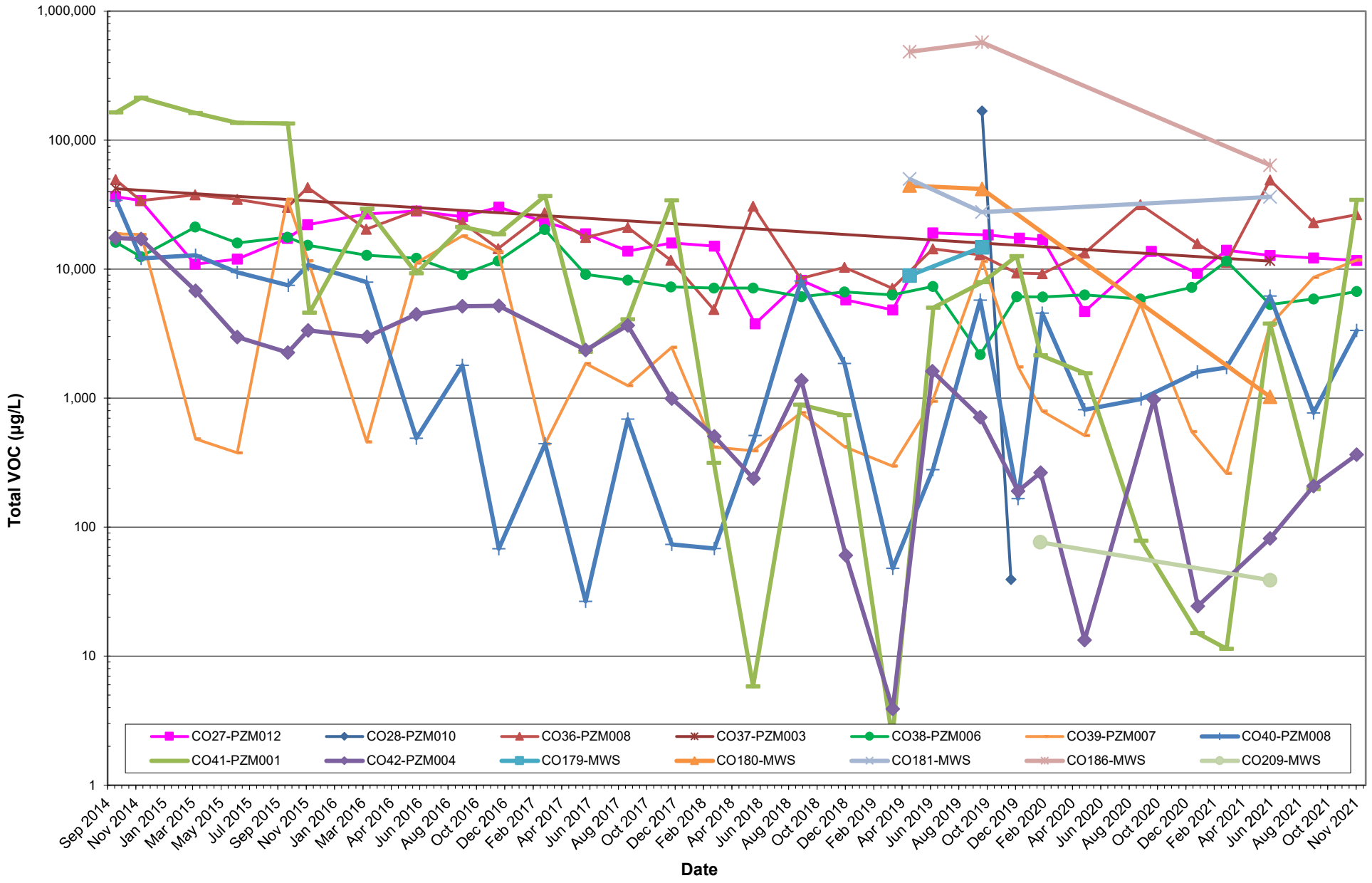
0 100 200 Feet

Former Coke Oven Area
Cell 2 Q4 Benzene Concentrations
Intermediate Zone

Date: 2/8/2022

Figure
C2-18

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 2 intermediate).mxd



ARM Group LLC
Engineers and Scientists

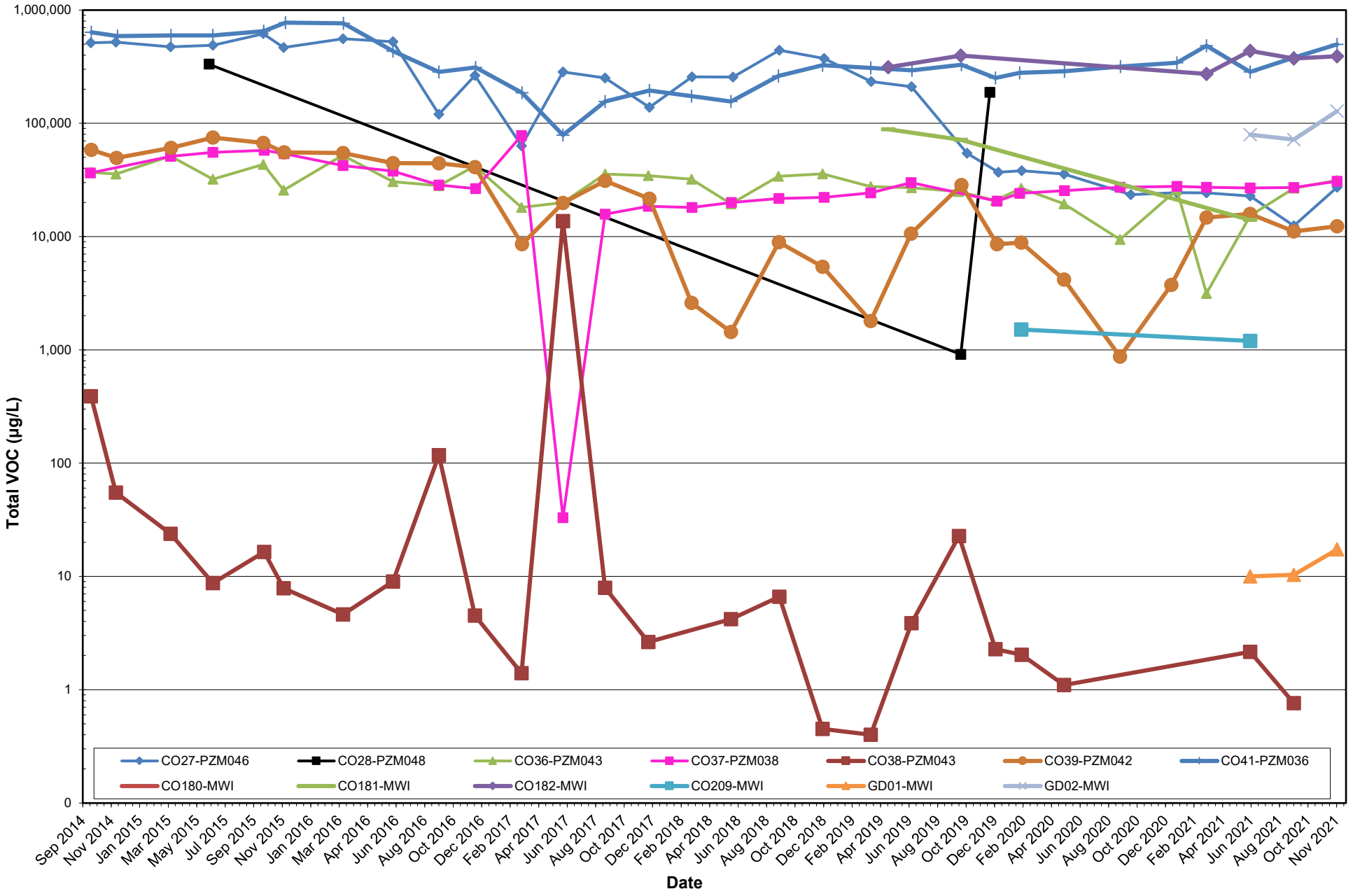
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Total VOCs in Groundwater Cell 2 Shallow Zone

February 1, 2022

Figure C2-19



ARM Group LLC
Engineers and Scientists

Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Total VOCs in Groundwater
Cell 2 Intermediate Zone

February 2, 2022

Figure
C2-20



N

ARM Group LLC
Engineers and Scientists

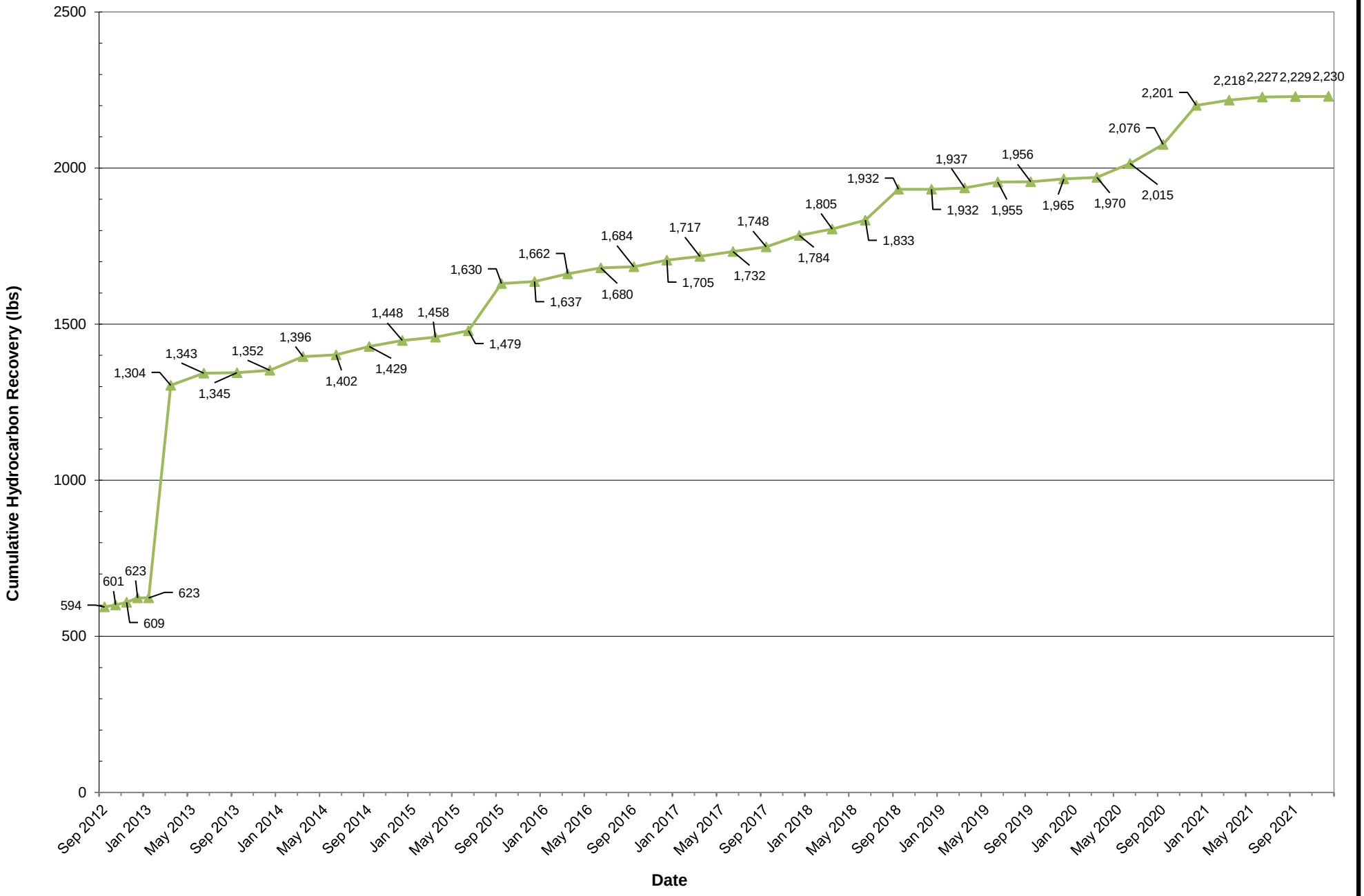
1 inch = 82 feet

0 40 80
Feet

Former Coke Oven Area
Cell 3 System Layout
AS/SVE
Date: 2/7/2022

Figure
C3-1

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021).mxd



ARM Group LLC
Engineers and Scientists

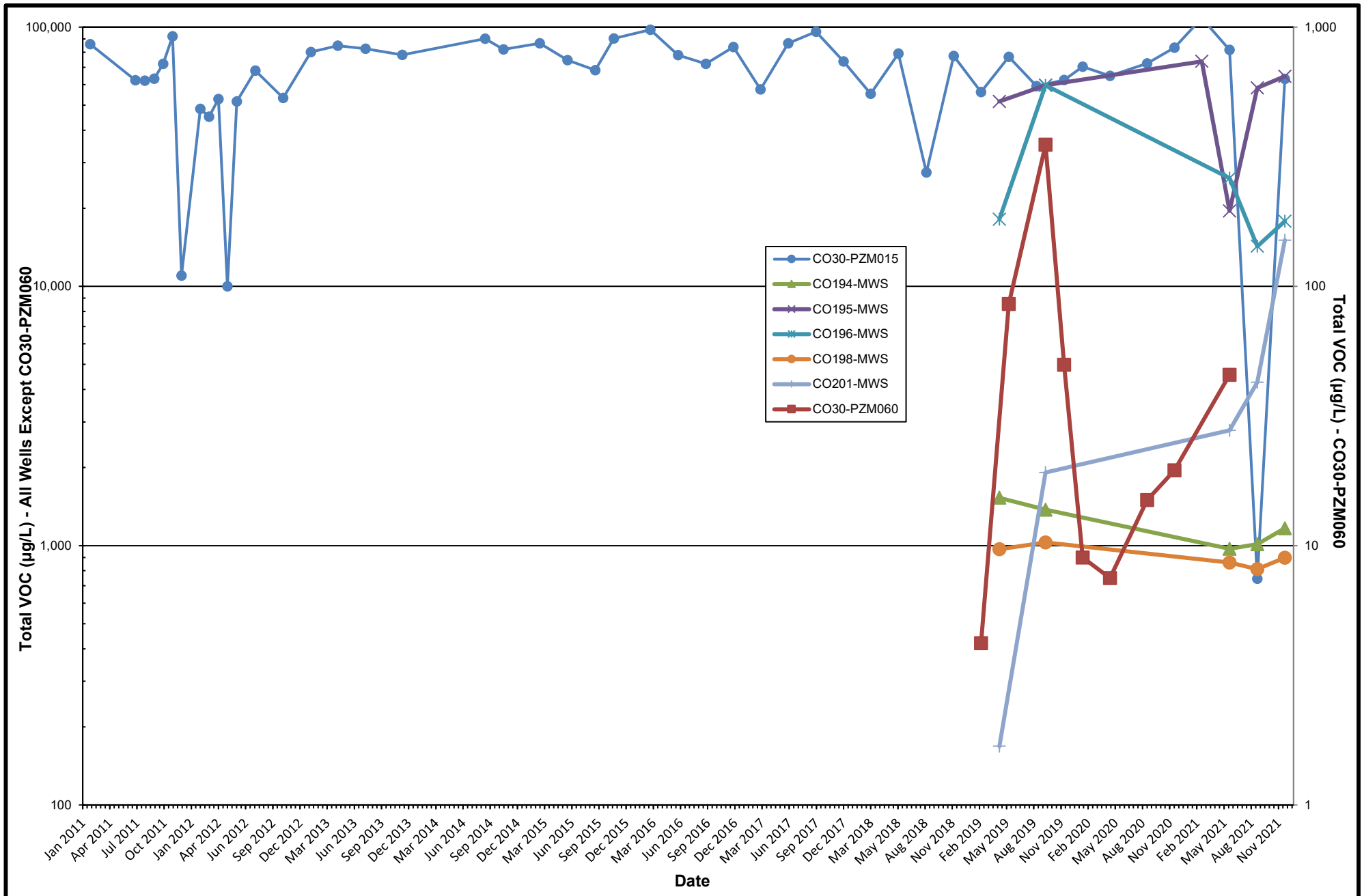
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Cumulative Hydrocarbon Recovery (lbs)
Cell 3

January 31, 2022

Figure
C3-2



ARM Group LLC
Engineers and Scientists

Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Total VOCs in Groundwater
Cell 3 Shallow Zone

February 1, 2022

Figure
C3-3



N

ARM Group LLC
Engineers and Scientists

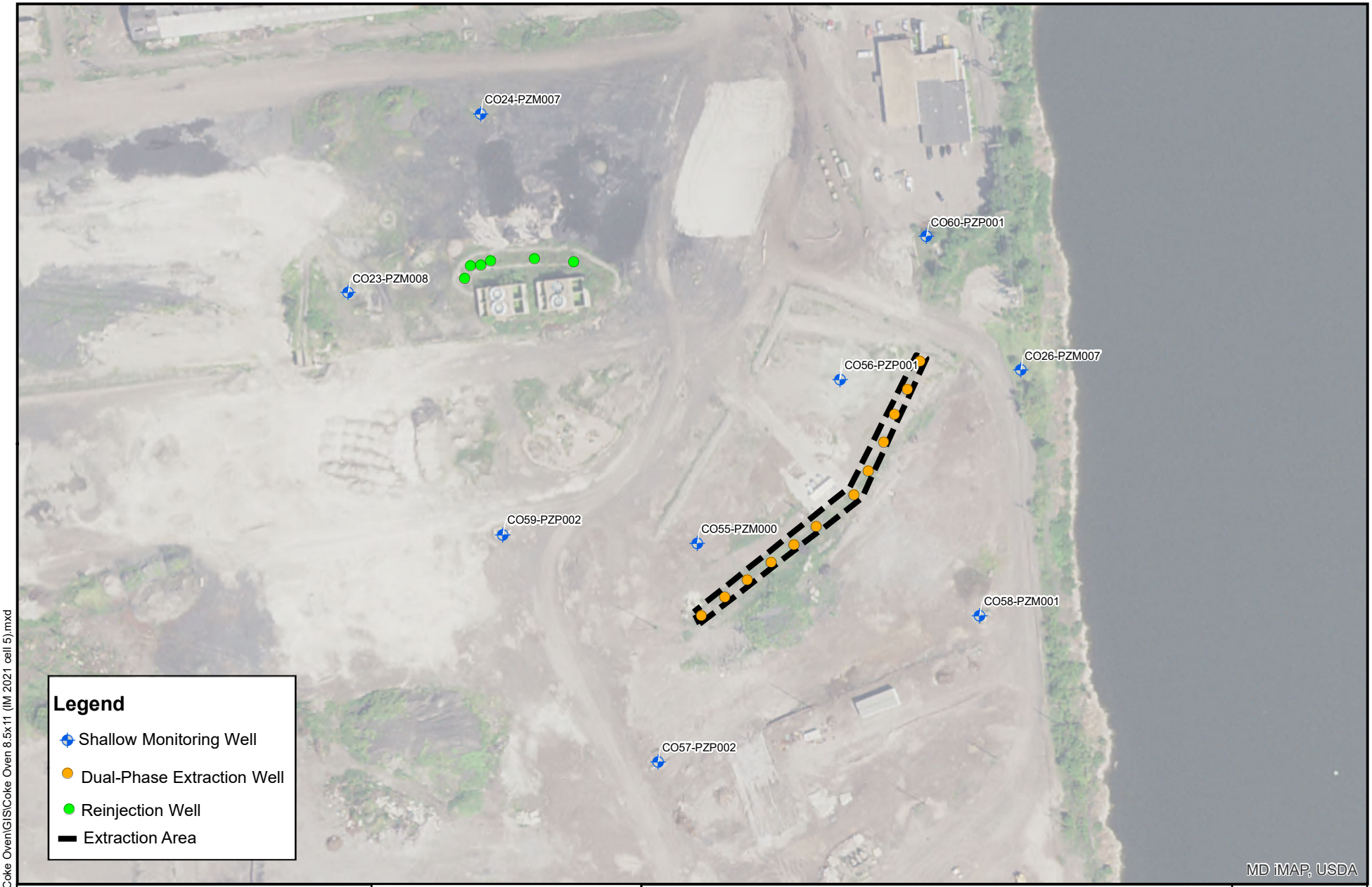
1 inch = 33 feet

0 15 30
Feet

Former Coke Oven Area
Cell 4 System Layout
DNAPL Recovery
Date: 2/22/2022

Figure
C4-1

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 4).mxd



N

ARM Group LLC
Engineers and Scientists

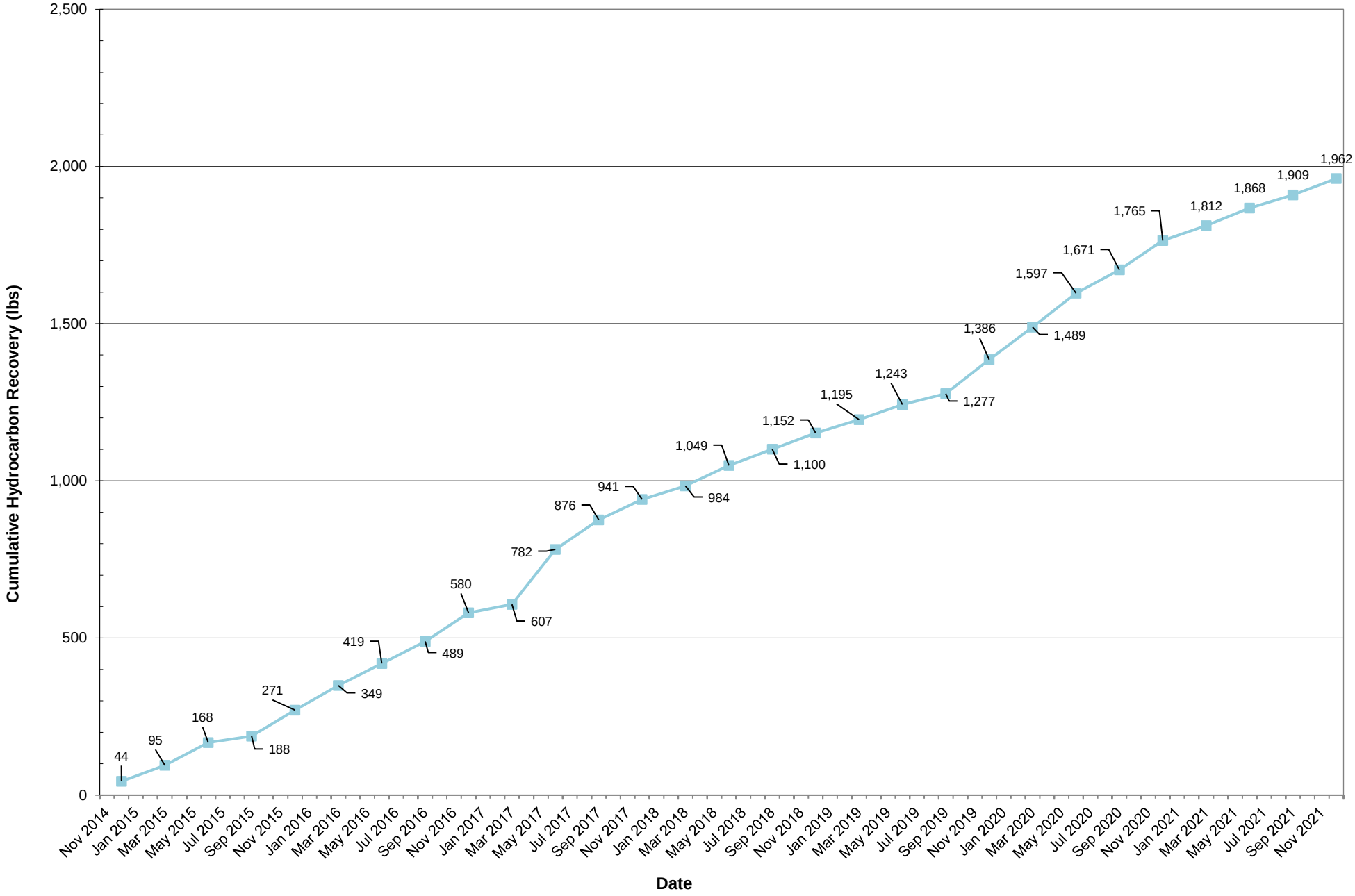
1 inch = 190 feet

0 95 190 Feet

Former Coke Oven Area
Cell 5 System Layout
DPE System
Date: 2/7/2022

Figure C5-1

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 5).mxd



ARM Group LLC
Engineers and Scientists

Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Cumulative Hydrocarbon Recovery (lbs)
Cell 5 - DPE System

January 31, 2022

Figure
C5-2



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

0 100 200 Feet

Former Coke Oven Area
Cell 5 Q1 Groundwater Elevation Map
Shallow Zone
Date: 2/7/2022

Figure C5-3

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 5).mxd



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

0 100 200 Feet

Former Coke Oven Area
Cell 5 Q2 Groundwater Elevation Map
Shallow Zone

Date: 2/7/2022

Figure C5-4

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 5).mxd



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

0 100 200 Feet

Former Coke Oven Area
Cell 5 Q3 Groundwater Elevation Map
Shallow Zone
Date: 2/7/2022

Figure C5-5

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 5).mxd



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

0 100 200 Feet

Former Coke Oven Area
Cell 5 Q4 Groundwater Elevation Map
Shallow Zone

Date: 2/7/2022

Figure C5-6

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 5).mxd



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

0 100 200 Feet

Former Coke Oven Area
Cell 5 Q1 Naphthalene Concentrations
Shallow Zone
Date: 2/7/2022

Figure C5-7

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 5).mxd



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

0 100 200
Feet

Former Coke Oven Area
Cell 5 Q2 Naphthalene Concentrations
Shallow Zone
Date: 2/7/2022

Figure C5-8

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 5).mxd



N

ARM Group LLC
Engineers and Scientists

1 inch = 200 feet

0 100 200
Feet

Former Coke Oven Area
Cell 5 Q3 Naphthalene Concentrations
Shallow Zone

Date: 2/7/2022

Figure
C5-9

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 5).mxd



N

ARM Group LLC
Engineers and Scientists

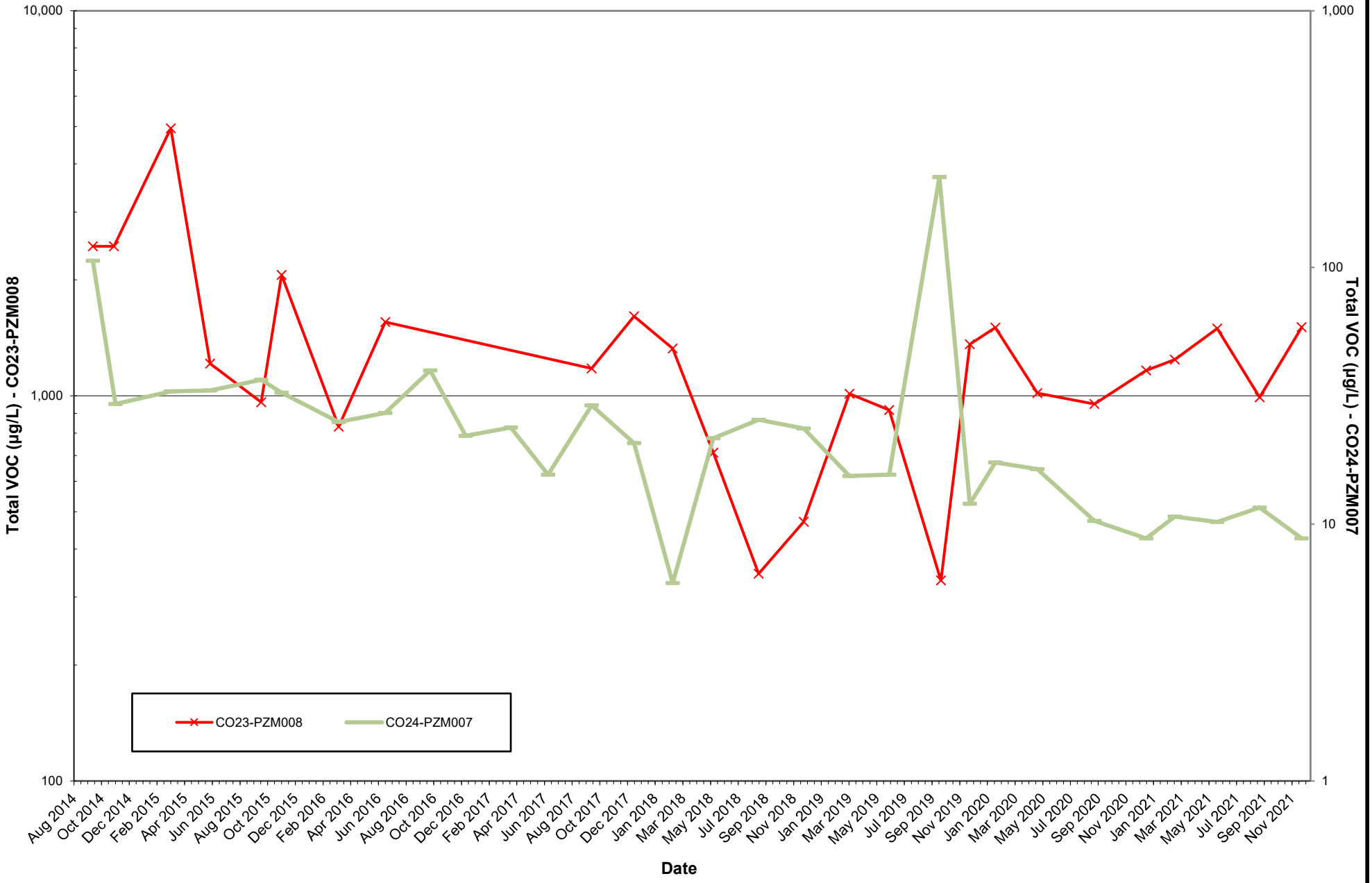
1 inch = 200 feet

0 100 200
Feet

Former Coke Oven Area
Cell 5 Q4 Naphthalene Concentrations
Shallow Zone
Date: 2/7/2022

Figure
C5-10

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (IM 2021 cell 5).mxd



ARM Group LLC
Engineers and Scientists

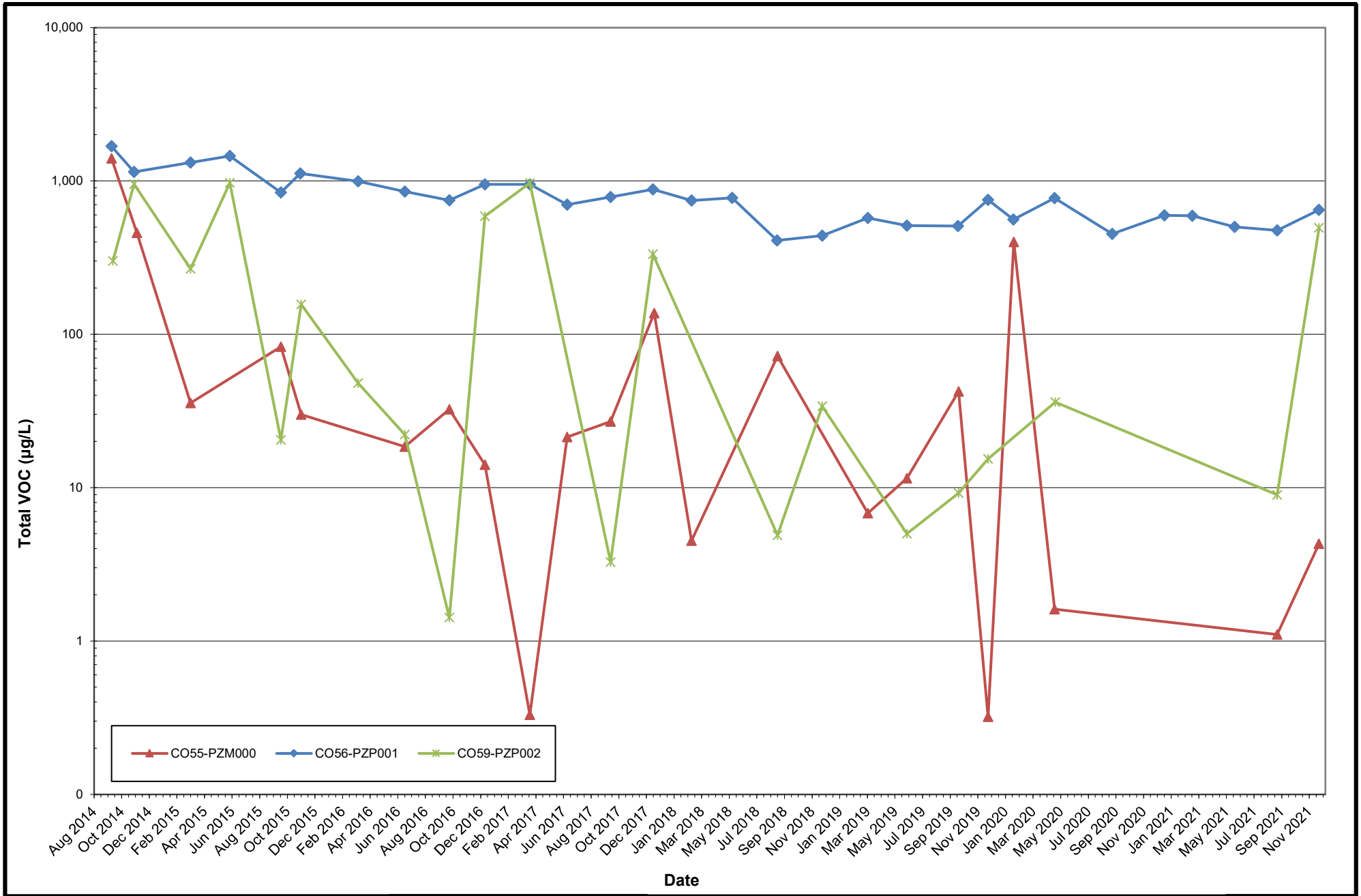
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Total VOCs in Groundwater
Cell 5 Reinjection-Area Monitoring Wells

February 1, 2022

Figure
C5-11



ARM Group LLC
Engineers and Scientists

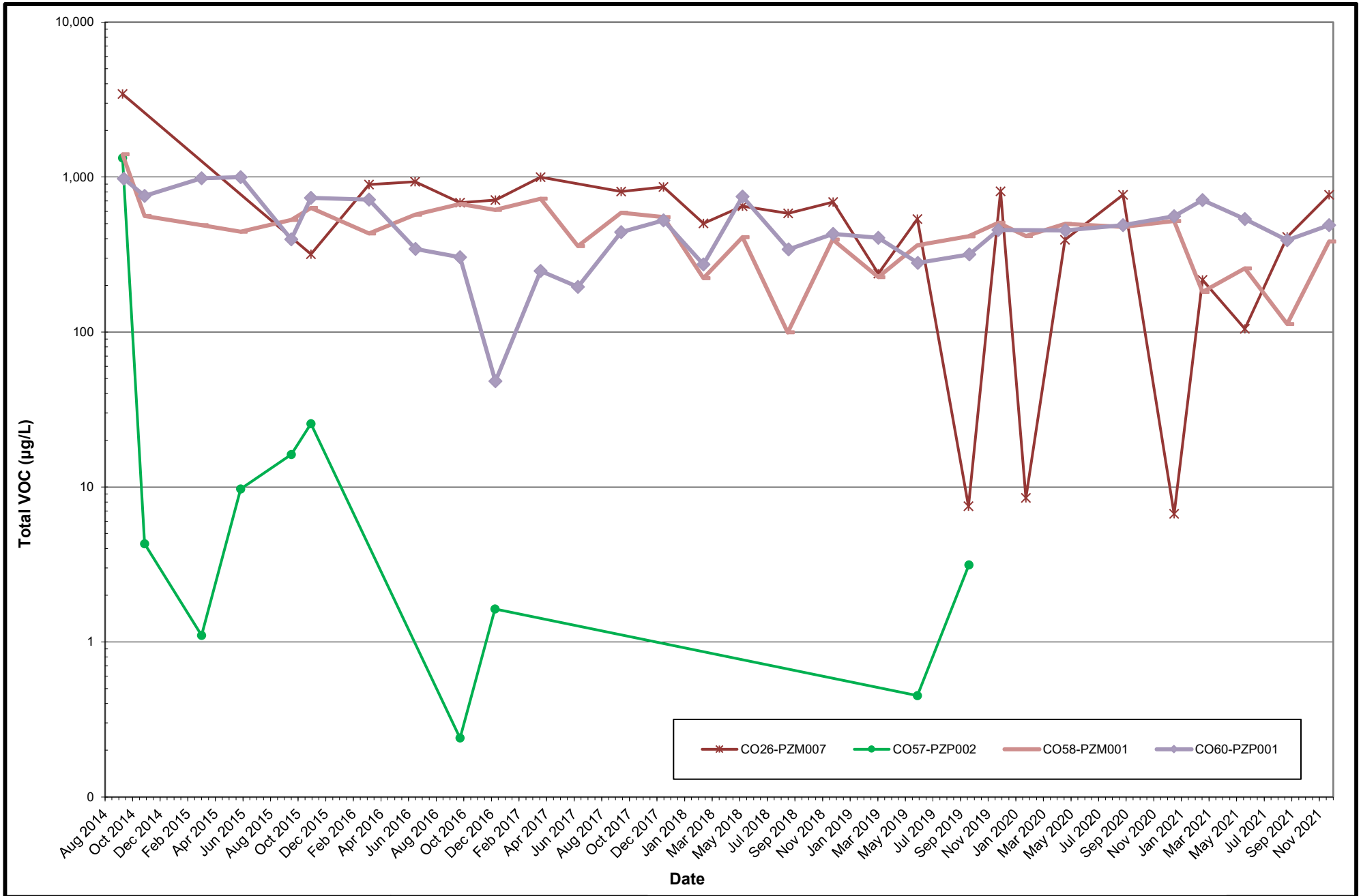
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Total VOCs in Groundwater
Cell 5 Extraction-Area Monitoring Wells

February 1, 2022

Figure
C5-12



ARM Group LLC
Engineers and Scientists

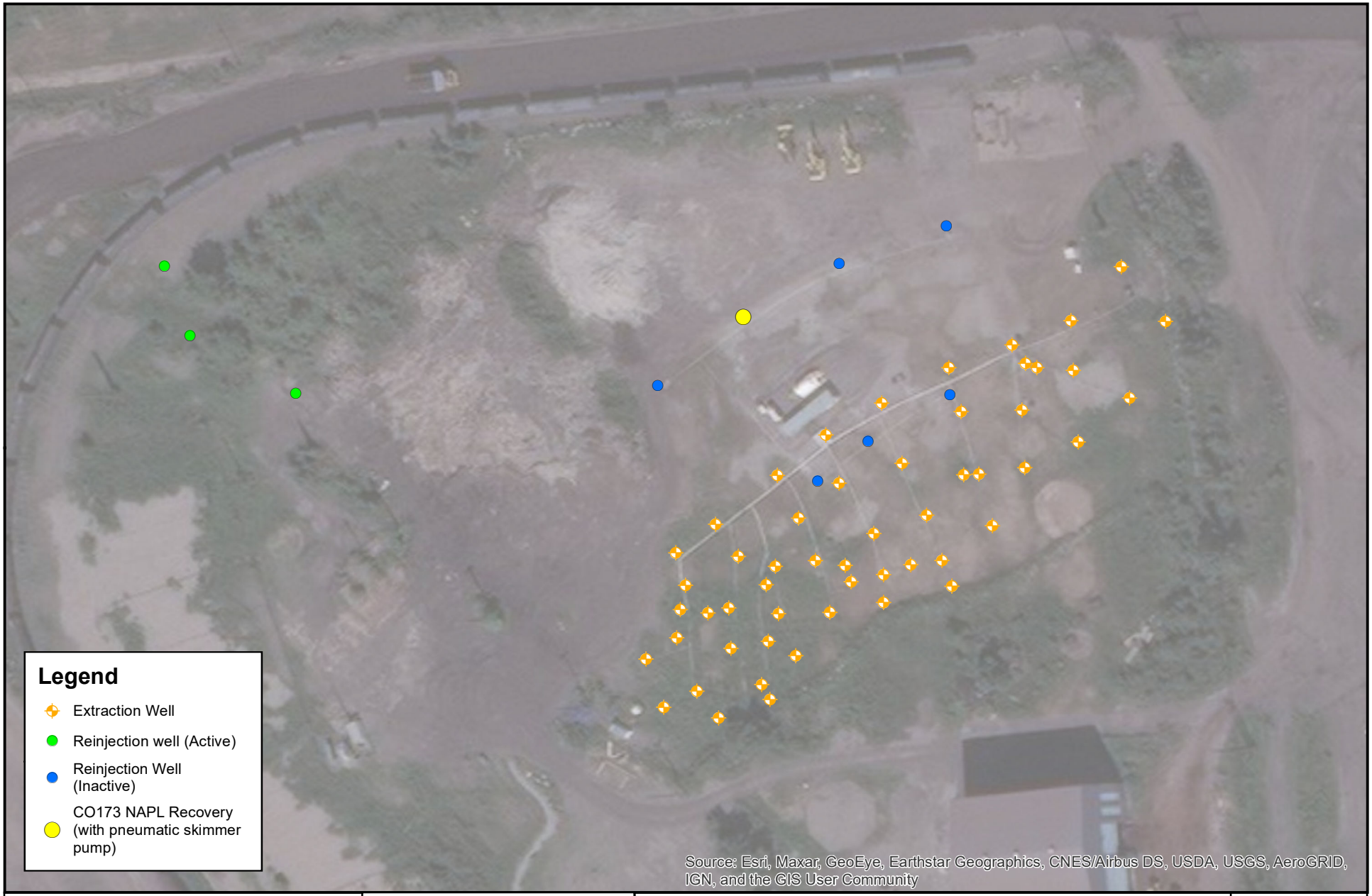
Former Coke Oven Area
Tradepoint Atlantic

Sparrows Point, Maryland

Total VOCs in Groundwater
Cell 5 Perimeter Monitoring Wells

February 1, 2022

Figure
C5-13



N

ARM Group LLC
Engineers and Scientists

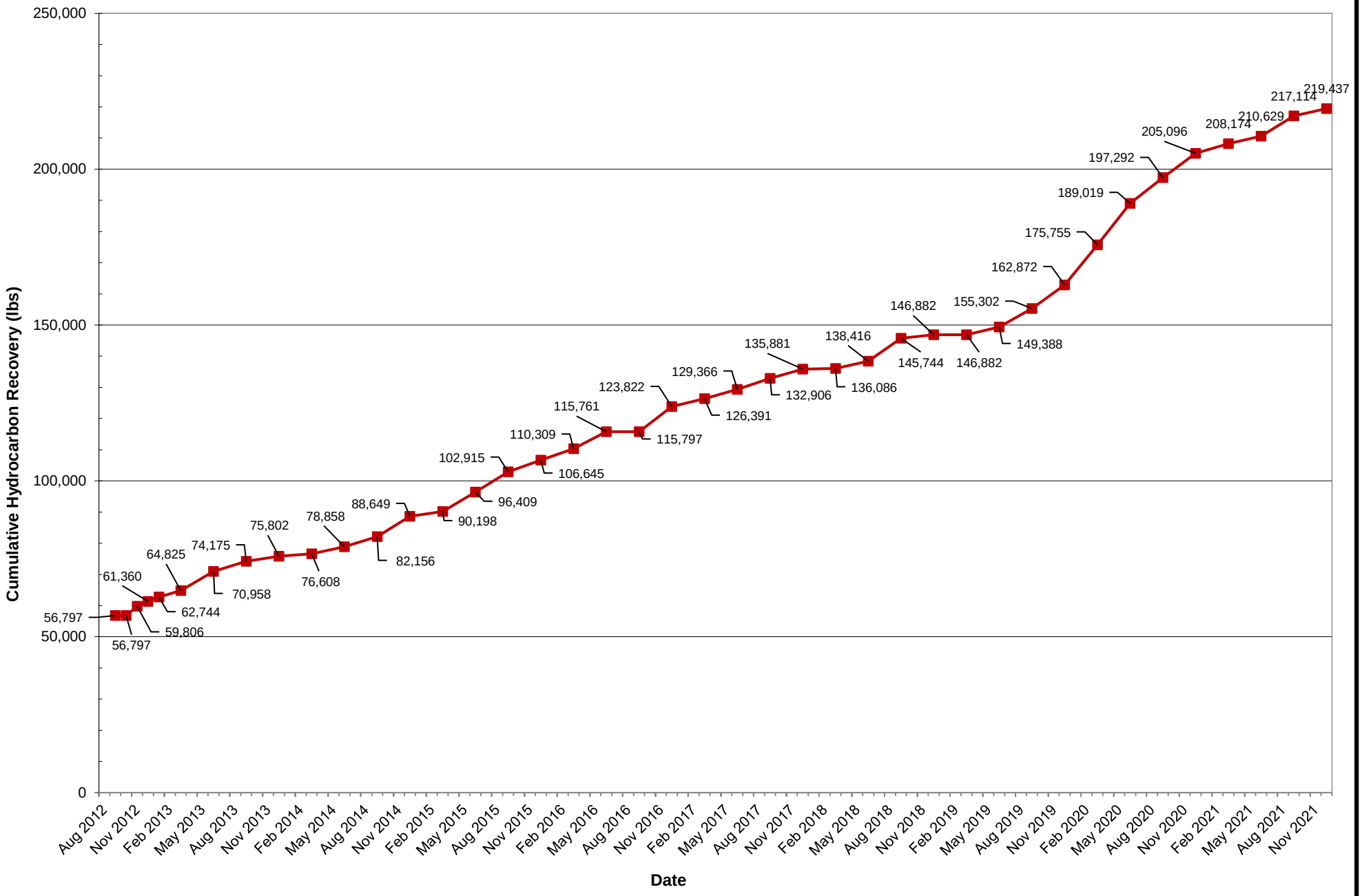
1 inch = 100 feet

0 50 100 Feet

Former Coke Oven Area
Cell 6 System Layout
MPE System and LNAPL Recovery
Date: 2/7/2022

Figure C6-1

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11.mxd



ARM Group LLC
Engineers and Scientists

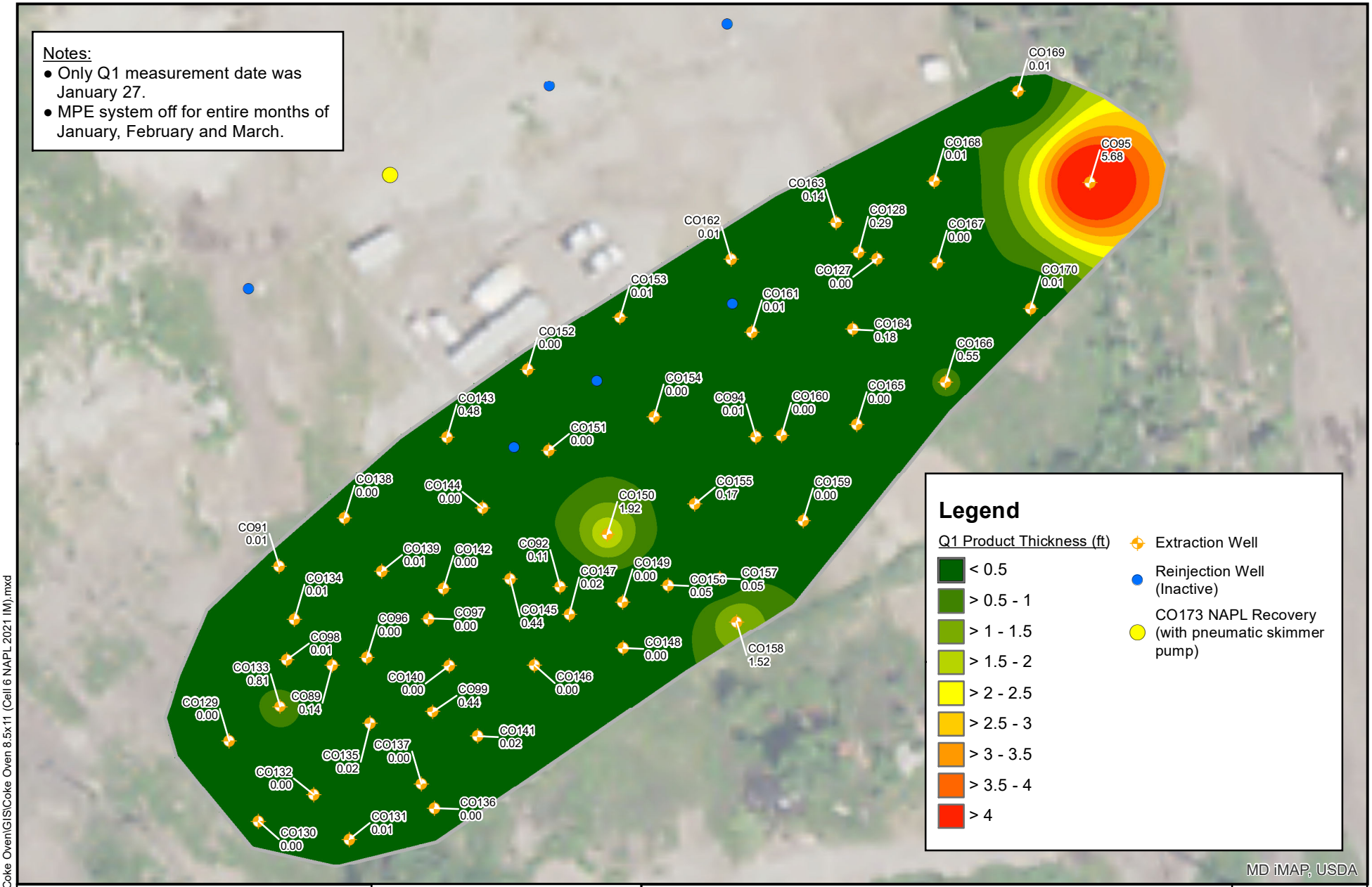
Former Coke Oven Area
Tradepoint Atlantic

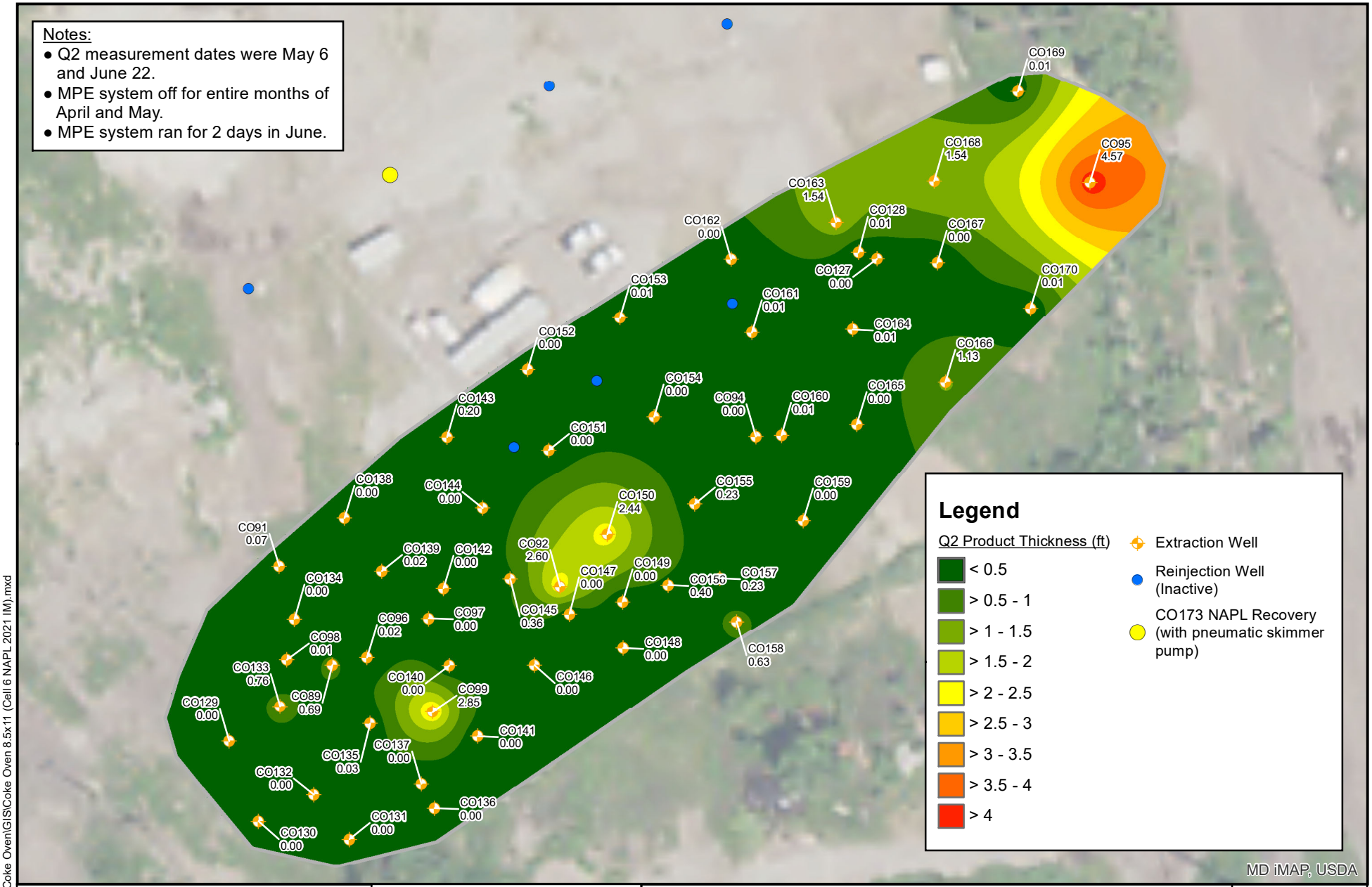
Sparrows Point, Maryland

Cumulative Hydrocarbon Recovery (lbs)
Cell 6

January 31, 2022

Figure
C6-2


Notes:
• Only Q1 measurement date was January 27.
• MPE system off for entire months of January, February and March.
CO169 0.01
CO168 0.01
CO95 5.68
CO163 0.14
CO128 0.29
CO162 0.01
CO167 0.00
CO127 0.00
CO170 0.01
CO153 0.01
CO161 0.01
CO164 0.18
CO152 0.00
CO166 0.55
CO154 0.00
CO165 0.00
CO143 0.48
CO94 0.01
CO160 0.00
CO151 0.00
CO138 0.00
CO144 0.00
CO155 0.17
CO159 0.00
CO150 1.92
CO91 0.01
CO139 0.01
CO142 0.00
CO92 0.11
CO147 0.02
CO149 0.00
CO156 0.05
CO157 0.05
CO134 0.01
CO145 0.44
CO96 0.00
CO97 0.00
CO98 0.01
CO148 0.00
CO158 1.52
CO133 0.81
CO140 0.00
CO146 0.00
CO99 0.44
CO89 0.14
CO129 0.00
CO141 0.02
CO135 0.02
CO137 0.00
CO132 0.00
CO136 0.00
CO131 0.01
CO130 0.00
Legend
Q1 Product Thickness (ft)
< 0.5
> 0.5 - 1
> 1 - 1.5
> 1.5 - 2
> 2 - 2.5
> 2.5 - 3
> 3 - 3.5
> 3.5 - 4
> 4
Extraction Well
Reinjection Well (Inactive)
CO173 NAPL Recovery (with pneumatic skimmer pump)
MD iMAP, USDA
N
ARM Group LLC
Engineers and Scientists
1 inch = 62 feet
0 30 60
Feet
Former Coke Oven Area
Cell 6 Extraction Wells
Q1 Average Product Thickness
Date: 2/11/2022
Figure
C6-3
P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (Cell 6 NAPL 2021 IM).mxd



N

ARM Group LLC
Engineers and Scientists

1 inch = 62 feet

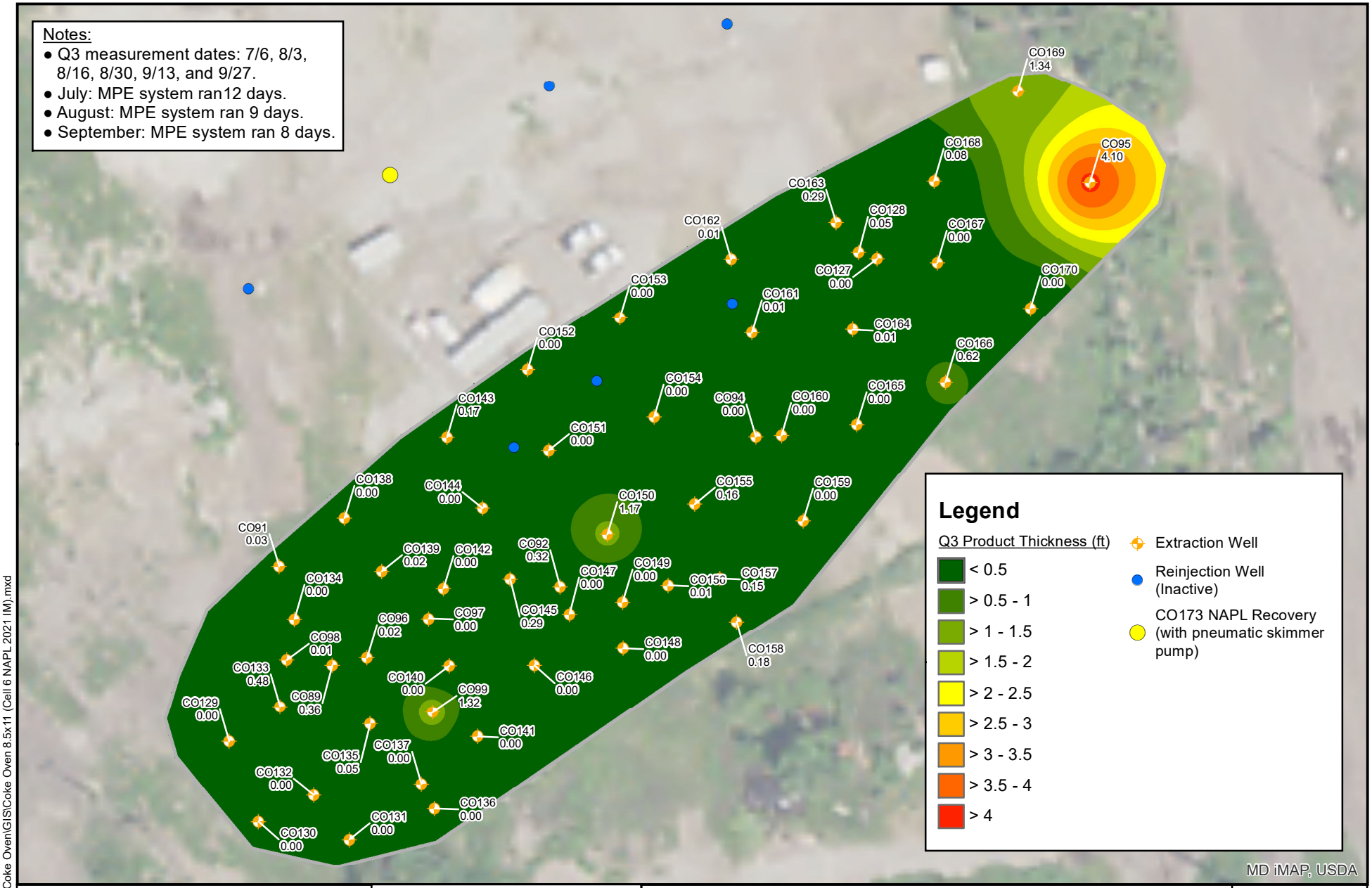
0 30 60 Feet

Former Coke Oven Area
Cell 6 Extraction Wells
Q2 Average Product Thickness

Date: 2/11/2022

Figure C6-4

P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (Cell 6 NAPL 2021 IM).mxd



P:\EnviroAnalytics Group\Coke Oven\GIS\Coke Oven 8.5x11 (Cell 6 NAPL 2021 IM).mxd

N

ARM Group LLC
Engineers and Scientists

1 inch = 62 feet

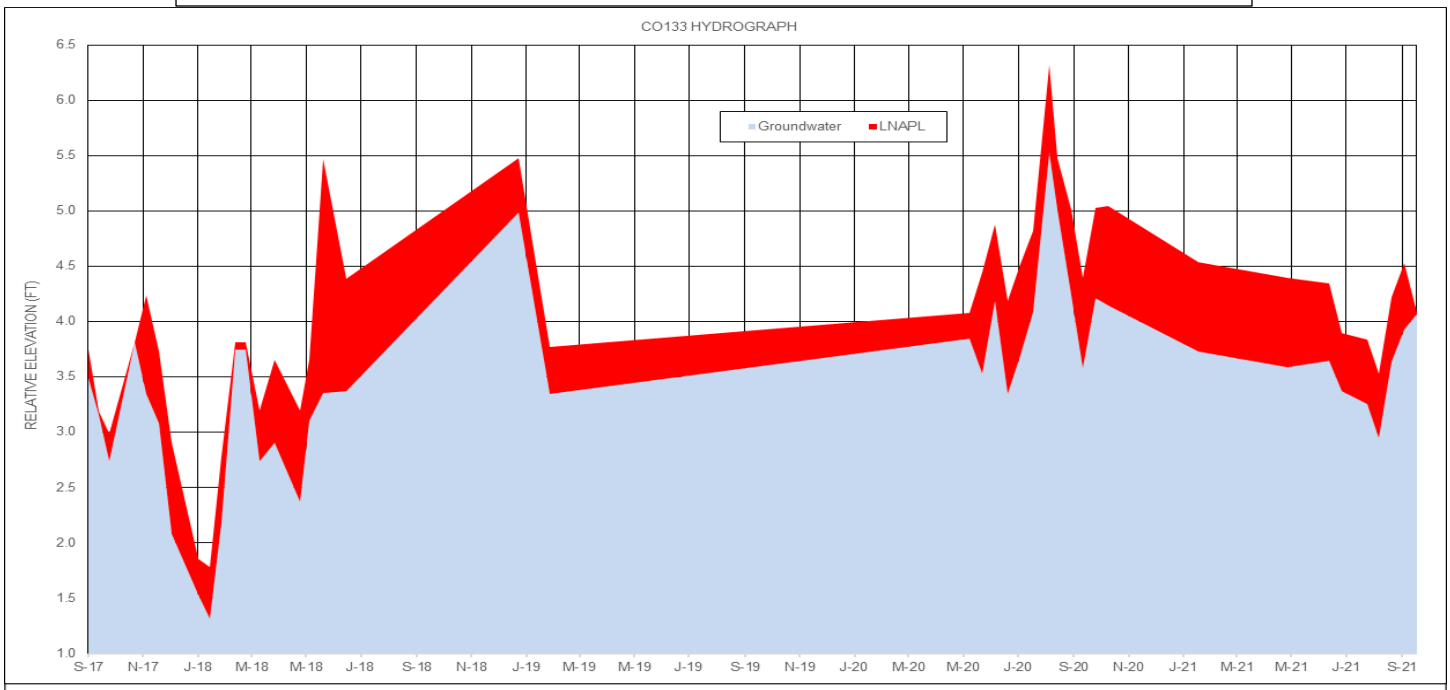
0 30 60 Feet

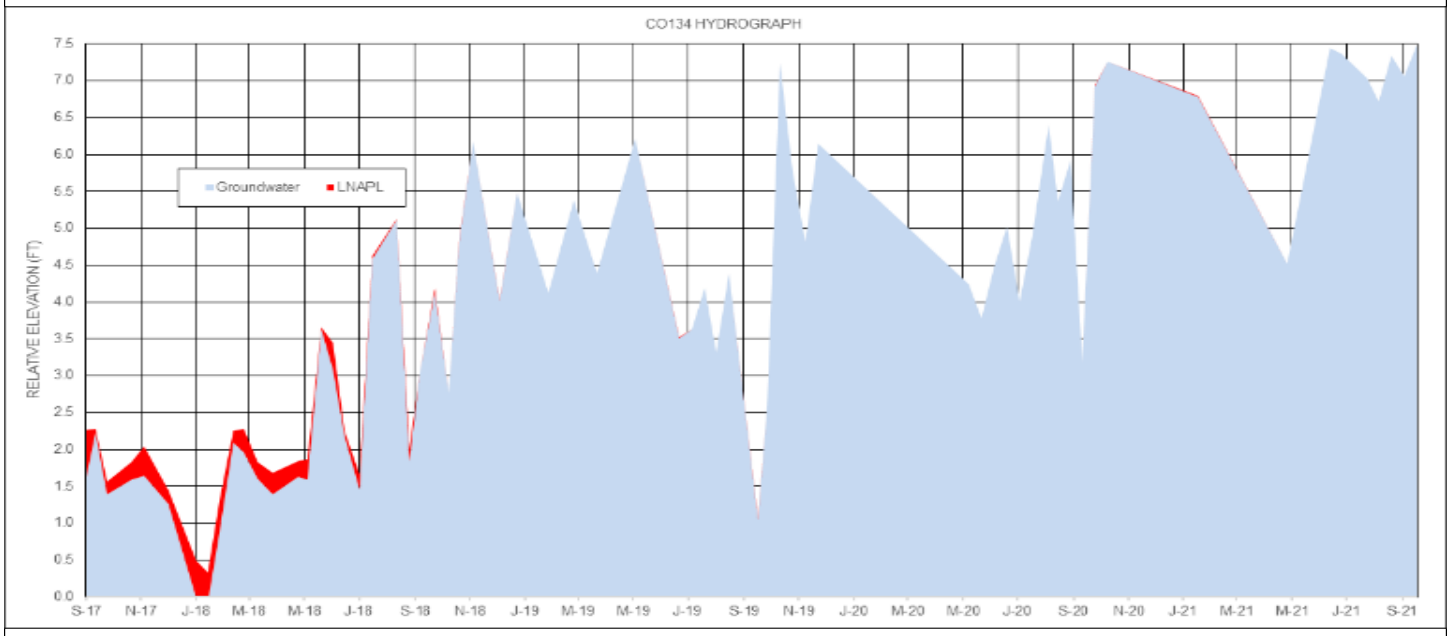
Former Coke Oven Area
Cell 6 Extraction Wells
Q3 Average Product Thickness

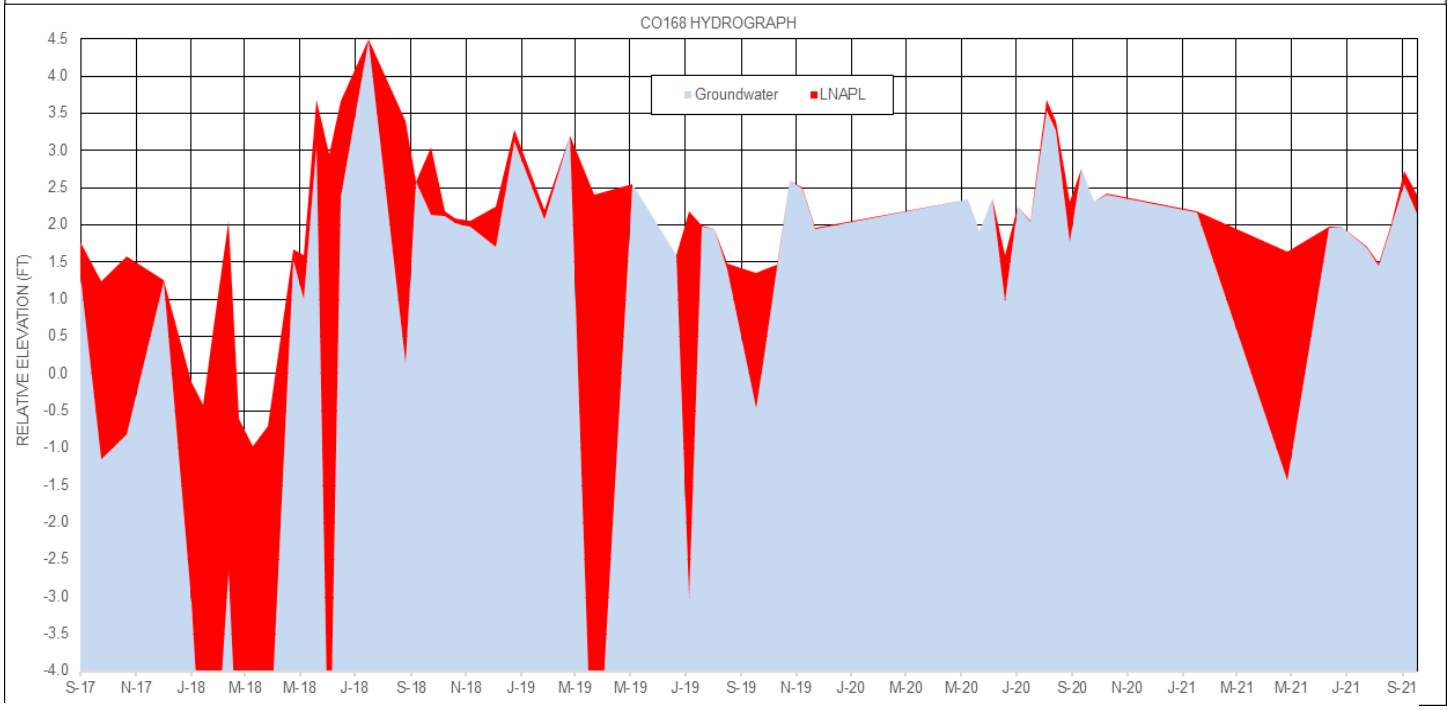
Date: 2/11/2022

Figure C6-5

Figure C6-6 Depth to Water vs. LNAPL Thickness Hydrographs







APPENDIX A

Laboratory Analytical Reports

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

March 17, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30409475

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on March 09, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30409475

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30409475

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30409475001	**Trip Blank Wt 1**	Water	03/09/21 00:01	03/09/21 23:00
30409475002	**CO36-PZM008**	Water	03/09/21 08:35	03/09/21 23:00
30409475003	**CO36-PZM043**	Water	03/09/21 09:25	03/09/21 23:00
30409475004	**CO38-PZM006**	Water	03/09/21 10:15	03/09/21 23:00
30409475005	**CO38-PZM043**	Water	03/09/21 11:00	03/09/21 23:00
30409475006	**CO27-PZM046**	Water	03/09/21 11:40	03/09/21 23:00
30409475007	**CO27-PZM012**	Water	03/09/21 12:15	03/09/21 23:00
30409475008	**CO39-PZM042**	Water	03/09/21 13:15	03/09/21 23:00
30409475009	**CO39-PZM007**	Water	03/09/21 14:00	03/09/21 23:00
30409475010	**CO37-PZM038**	Water	03/09/21 14:50	03/09/21 23:00

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30409475

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30409475001	**Trip Blank Wt 1**	EPA 8260B	AJC	9	PASI-PA
30409475002	**CO36-PZM008**	EPA 8260B	AJC	9	PASI-PA
30409475003	**CO36-PZM043**	EPA 8260B	AJC	9	PASI-PA
30409475004	**CO38-PZM006**	EPA 8260B	AJC	9	PASI-PA
30409475005	**CO38-PZM043**	EPA 8260B	AJC	9	PASI-PA
30409475006	**CO27-PZM046**	EPA 8260B	AJC	9	PASI-PA
30409475007	**CO27-PZM012**	EPA 8260B	AJC	9	PASI-PA
30409475008	**CO39-PZM042**	EPA 8260B	AJC	9	PASI-PA
30409475009	**CO39-PZM007**	EPA 8260B	AJC	9	PASI-PA
30409475010	**CO37-PZM038**	EPA 8260B	AJC	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409475

Sample: Trip Blank Wt 1 **Lab ID: 30409475001** Collected: 03/09/21 00:01 Received: 03/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		03/15/21 14:10	71-43-2	1c
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		03/15/21 14:10	100-41-4	1c
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		03/15/21 14:10	91-20-3	1c
Toluene	**1.0 U**	ug/L	1.0	0.32	1		03/15/21 14:10	108-88-3	1c
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		03/15/21 14:10	1330-20-7	1c
Surrogates									
4-Bromofluorobenzene (S)	114	%.	70-130		1		03/15/21 14:10	460-00-4	1c
1,2-Dichloroethane-d4 (S)	105	%.	70-130		1		03/15/21 14:10	17060-07-0	1c
Toluene-d8 (S)	96	%.	70-130		1		03/15/21 14:10	2037-26-5	1c
Dibromofluoromethane (S)	103	%.	70-130		1		03/15/21 14:10	1868-53-7	1c

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409475

Sample: CO36-PZM008 **Lab ID: 30409475002** Collected: 03/09/21 08:35 Received: 03/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**9050**	ug/L	200	67.6	200		03/17/21 00:02	71-43-2	
Ethylbenzene	**18.7**	ug/L	5.0	2.0	5		03/16/21 23:37	100-41-4	
Naphthalene	**378**	ug/L	10.0	4.1	5		03/16/21 23:37	91-20-3	
Toluene	**1570**	ug/L	5.0	1.6	5		03/16/21 23:37	108-88-3	
Xylene (Total)	**659**	ug/L	15.0	6.8	5		03/16/21 23:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		5		03/16/21 23:37	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%.	70-130		5		03/16/21 23:37	17060-07-0	
Toluene-d8 (S)	102	%.	70-130		5		03/16/21 23:37	2037-26-5	
Dibromofluoromethane (S)	97	%.	70-130		5		03/16/21 23:37	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409475

Sample: CO36-PZM043 **Lab ID: 30409475003** Collected: 03/09/21 09:25 Received: 03/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**2750**	ug/L	200	67.6	200		03/16/21 22:21	71-43-2	
Ethylbenzene	**5.0 U**	ug/L	5.0	2.0	5		03/16/21 21:56	100-41-4	
Naphthalene	**131**	ug/L	10.0	4.1	5		03/16/21 21:56	91-20-3	
Toluene	**263**	ug/L	5.0	1.6	5		03/16/21 21:56	108-88-3	
Xylene (Total)	**134**	ug/L	15.0	6.8	5		03/16/21 21:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	114	%.	70-130		5		03/16/21 21:56	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%.	70-130		5		03/16/21 21:56	17060-07-0	
Toluene-d8 (S)	102	%.	70-130		5		03/16/21 21:56	2037-26-5	
Dibromofluoromethane (S)	96	%.	70-130		5		03/16/21 21:56	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409475

Sample: CO38-PZM006 **Lab ID: 30409475004** Collected: 03/09/21 10:15 Received: 03/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**9970**	ug/L	50.0	16.9	50		03/16/21 20:39	71-43-2	
Ethylbenzene	**52.0**	ug/L	5.0	2.0	5		03/16/21 20:14	100-41-4	
Naphthalene	**1140**	ug/L	10.0	4.1	5		03/16/21 20:14	91-20-3	
Toluene	**1080**	ug/L	5.0	1.6	5		03/16/21 20:14	108-88-3	
Xylene (Total)	**420**	ug/L	15.0	6.8	5		03/16/21 20:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		5		03/16/21 20:14	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%.	70-130		5		03/16/21 20:14	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		5		03/16/21 20:14	2037-26-5	
Dibromofluoromethane (S)	96	%.	70-130		5		03/16/21 20:14	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409475

Sample: CO38-PZM043 **Lab ID: 30409475005** Collected: 03/09/21 11:00 Received: 03/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		03/15/21 14:36	71-43-2	1c
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		03/15/21 14:36	100-41-4	1c
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		03/15/21 14:36	91-20-3	1c
Toluene	**1.0 U**	ug/L	1.0	0.32	1		03/15/21 14:36	108-88-3	1c
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		03/15/21 14:36	1330-20-7	1c
Surrogates									
4-Bromofluorobenzene (S)	114	%.	70-130		1		03/15/21 14:36	460-00-4	1c
1,2-Dichloroethane-d4 (S)	108	%.	70-130		1		03/15/21 14:36	17060-07-0	1c
Toluene-d8 (S)	97	%.	70-130		1		03/15/21 14:36	2037-26-5	1c
Dibromofluoromethane (S)	102	%.	70-130		1		03/15/21 14:36	1868-53-7	1c

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409475

Sample: CO27-PZM046 **Lab ID: 30409475006** Collected: 03/09/21 11:40 Received: 03/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**22300**	ug/L	2000	676	2000		03/17/21 01:43	71-43-2	
Ethylbenzene	**46.6**	ug/L	5.0	2.0	5		03/17/21 01:18	100-41-4	
Naphthalene	**290**	ug/L	10.0	4.1	5		03/17/21 01:18	91-20-3	
Toluene	**1450**	ug/L	5.0	1.6	5		03/17/21 01:18	108-88-3	
Xylene (Total)	**486**	ug/L	15.0	6.8	5		03/17/21 01:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		5		03/17/21 01:18	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		5		03/17/21 01:18	17060-07-0	
Toluene-d8 (S)	102	%.	70-130		5		03/17/21 01:18	2037-26-5	
Dibromofluoromethane (S)	92	%.	70-130		5		03/17/21 01:18	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409475

Sample: CO27-PZM012 **Lab ID: 30409475007** Collected: 03/09/21 12:15 Received: 03/09/21 23:00 Matrix: Water

Comments: • Collection time on sample labels does not match COC.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**12700**	ug/L	2000	676	2000		03/17/21 00:53	71-43-2	
Ethylbenzene	**28.2**	ug/L	5.0	2.0	5		03/17/21 00:27	100-41-4	
Naphthalene	**1120**	ug/L	10.0	4.1	5		03/17/21 00:27	91-20-3	
Toluene	**1060**	ug/L	5.0	1.6	5		03/17/21 00:27	108-88-3	
Xylene (Total)	**234**	ug/L	15.0	6.8	5		03/17/21 00:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		5		03/17/21 00:27	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		5		03/17/21 00:27	17060-07-0	
Toluene-d8 (S)	102	%.	70-130		5		03/17/21 00:27	2037-26-5	
Dibromofluoromethane (S)	95	%.	70-130		5		03/17/21 00:27	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409475

Sample: CO39-PZM042 **Lab ID: 30409475008** Collected: 03/09/21 13:15 Received: 03/09/21 23:00 Matrix: Water

Comments: • Sample vials were not labeled.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**10300**	ug/L	50.0	16.9	50		03/16/21 21:30	71-43-2	
Ethylbenzene	**102**	ug/L	5.0	2.0	5		03/16/21 21:05	100-41-4	
Naphthalene	**705**	ug/L	10.0	4.1	5		03/16/21 21:05	91-20-3	
Toluene	**3450**	ug/L	50.0	15.8	50		03/16/21 21:30	108-88-3	
Xylene (Total)	**869**	ug/L	15.0	6.8	5		03/16/21 21:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		5		03/16/21 21:05	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		5		03/16/21 21:05	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		5		03/16/21 21:05	2037-26-5	
Dibromofluoromethane (S)	93	%.	70-130		5		03/16/21 21:05	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409475

Sample: CO39-PZM007 **Lab ID: 30409475009** Collected: 03/09/21 14:00 Received: 03/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**249**	ug/L	5.0	1.7	5		03/16/21 18:06	71-43-2	
Ethylbenzene	**5.0 U**	ug/L	5.0	2.0	5		03/16/21 18:06	100-41-4	
Naphthalene	**171**	ug/L	10.0	4.1	5		03/16/21 18:06	91-20-3	
Toluene	**12.2**	ug/L	5.0	1.6	5		03/16/21 18:06	108-88-3	
Xylene (Total)	**15.0 U**	ug/L	15.0	6.8	5		03/16/21 18:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%.	70-130		5		03/16/21 18:06	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%.	70-130		5		03/16/21 18:06	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		5		03/16/21 18:06	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		5		03/16/21 18:06	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409475

Sample: CO37-PZM038 **Lab ID: 30409475010** Collected: 03/09/21 14:50 Received: 03/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**16400**	ug/L	200	67.6	200		03/16/21 23:11	71-43-2	
Ethylbenzene	**217**	ug/L	5.0	2.0	5		03/16/21 22:46	100-41-4	
Naphthalene	**1210**	ug/L	10.0	4.1	5		03/16/21 22:46	91-20-3	
Toluene	**8710**	ug/L	200	63.4	200		03/16/21 23:11	108-88-3	
Xylene (Total)	**1910**	ug/L	15.0	6.8	5		03/16/21 22:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	70-130		5		03/16/21 22:46	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%.	70-130		5		03/16/21 22:46	17060-07-0	
Toluene-d8 (S)	104	%.	70-130		5		03/16/21 22:46	2037-26-5	
Dibromofluoromethane (S)	93	%.	70-130		5		03/16/21 22:46	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30409475

QC Batch: 438678
QC Batch Method: EPA 8260B
Analysis Method: EPA 8260B
Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30409475001, 30409475005

METHOD BLANK: 2117828 Matrix: Water
Associated Lab Samples: 30409475001, 30409475005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	03/15/21 13:44	1c
Ethylbenzene	ug/L	1.0 U	1.0	0.40	03/15/21 13:44	1c
Naphthalene	ug/L	2.0 U	2.0	0.82	03/15/21 13:44	1c
Toluene	ug/L	1.0 U	1.0	0.32	03/15/21 13:44	1c
Xylene (Total)	ug/L	3.0 U	3.0	1.4	03/15/21 13:44	1c
1,2-Dichloroethane-d4 (S)	%.	102	70-130		03/15/21 13:44	1c
4-Bromofluorobenzene (S)	%.	114	70-130		03/15/21 13:44	1c
Dibromofluoromethane (S)	%.	104	70-130		03/15/21 13:44	1c
Toluene-d8 (S)	%.	98	70-130		03/15/21 13:44	1c

LABORATORY CONTROL SAMPLE: 2117829

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.5	97	70-130	1c
Ethylbenzene	ug/L	20	19.5	97	70-130	1c
Naphthalene	ug/L	20	20.8	104	55-160	1c
Toluene	ug/L	20	19.5	97	70-130	1c
Xylene (Total)	ug/L	60	57.3	95	70-130	1c
1,2-Dichloroethane-d4 (S)	%.			104	70-130	1c
4-Bromofluorobenzene (S)	%.			100	70-130	1c
Dibromofluoromethane (S)	%.			102	70-130	1c
Toluene-d8 (S)	%.			99	70-130	1c

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30409475

QC Batch: 438855 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30409475002, 30409475003, 30409475004, 30409475006, 30409475007, 30409475008, 30409475009, 30409475010

METHOD BLANK: 2118638 Matrix: Water
Associated Lab Samples: 30409475002, 30409475003, 30409475004, 30409475006, 30409475007, 30409475008, 30409475009, 30409475010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	03/16/21 17:41	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	03/16/21 17:41	
Naphthalene	ug/L	2.0 U	2.0	0.82	03/16/21 17:41	
Toluene	ug/L	1.0 U	1.0	0.32	03/16/21 17:41	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	03/16/21 17:41	
1,2-Dichloroethane-d4 (S)	%.	106	70-130		03/16/21 17:41	
4-Bromofluorobenzene (S)	%.	115	70-130		03/16/21 17:41	
Dibromofluoromethane (S)	%.	101	70-130		03/16/21 17:41	
Toluene-d8 (S)	%.	101	70-130		03/16/21 17:41	

LABORATORY CONTROL SAMPLE: 2118639

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	16.8	84	70-130	
Ethylbenzene	ug/L	20	17.6	88	70-130	
Naphthalene	ug/L	20	18.4	92	55-160	
Toluene	ug/L	20	17.6	88	70-130	
Xylene (Total)	ug/L	60	50.3	84	70-130	
1,2-Dichloroethane-d4 (S)	%.			102	70-130	
4-Bromofluorobenzene (S)	%.			103	70-130	
Dibromofluoromethane (S)	%.			102	70-130	
Toluene-d8 (S)	%.			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2118640 2118641

Parameter	Units	30409475009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	249	100	100	368	357	119	107	50-149	3	30	
Ethylbenzene	ug/L	5.0 U	100	100	98.9	97.6	99	98	63-135	1	30	
Naphthalene	ug/L	171	100	100	260	251	90	80	30-157	4	30	
Toluene	ug/L	12.2	100	100	113	111	101	99	59-139	2	30	
Xylene (Total)	ug/L	15.0 U	300	300	288	283	96	94	63-135	2	30	
1,2-Dichloroethane-d4 (S)	%.						101	100	70-130			
4-Bromofluorobenzene (S)	%.						103	104	70-130			
Dibromofluoromethane (S)	%.						99	100	70-130			
Toluene-d8 (S)	%.						102	104	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30409475

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

BATCH QUALIFIERS

Batch: 438678

[1] A matrix spike/matrix spike duplicate was not performed for this batch due to an instrument error

ANALYTE QUALIFIERS

1c A matrix spike/matrix spike duplicate was not performed for this batch due to an instrument error

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30409475

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30409475001	**Trip Blank Wt 1**	EPA 8260B	438678		
30409475002	**CO36-PZM008**	EPA 8260B	438855		
30409475003	**CO36-PZM043**	EPA 8260B	438855		
30409475004	**CO38-PZM006**	EPA 8260B	438855		
30409475005	**CO38-PZM043**	EPA 8260B	438678		
30409475006	**CO27-PZM046**	EPA 8260B	438855		
30409475007	**CO27-PZM012**	EPA 8260B	438855		
30409475008	**CO39-PZM042**	EPA 8260B	438855		
30409475009	**CO39-PZM007**	EPA 8260B	438855		
30409475010	**CO37-PZM038**	EPA 8260B	438855		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request D

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

WO# : 30409475

30409475

Section A
Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B
Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	20010210
Project Name:	COA
Project Number:	20010210

Section C
Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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

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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-			3/9/21	—		2				2						X		001
2	C036-PZM008	WT					835		3				3						X		002
3	C036-PZM043	WT					925		3				3						X		003
4	C038-PZM006	WT					1015		3				3						X		004
5	C038-PZM043	WT					1100		3				3						X		005
6	C027-PZM046	WT					1140		3				3						X		006
7	C027-PZM012	WT					1215		3				3						X		007
8	C039-PZM042	WT					1315		3				3						X		008
9	C039-PZM007	WT					1400		3				3						X		009
10	C037-PZM038	WT					1450		3				3						X		010
11																					
12																					

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No	Lisa Perrin ARM	3/9/21	1600	PACE		1600
Data Validation Required? (Y/N): No	PACE	3/9/21	1944	CRDS PACE	3-9-21	1955
If data package is required, attach data package checklist.	CRDS PACE	3-9-21	2300	Marissa Llamas	3-9-2021	2300

Sample Conditions

Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Y		
Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: Lisa Perrin

DATE Signed (MM/DD/YY): 3/9/21

*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.

Pittsburgh Lab Sample Condition Upon Receipt

30409460

30409475

Pace Analytical

Client Name: Tradepoint Atlantic Project #

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

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.8 °C Correction Factor: 0 °C Final Temp: 2.8 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MLL 3/10/2016
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 COZ7-PZM012 read time 1355 on sample label but read 1215 on COC	
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed MLL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution: There were 3 vials with no information on sample label. I assumed it may be COZ9-PZM042 since that was the only missing sample

☐ **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 18, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30409773

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on March 10, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30409773

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30409773

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30409773001	**Trip Blank Wt 1**	Water	03/10/21 00:01	03/10/21 22:00
30409773002	**CO40-PZM008**	Water	03/10/21 08:50	03/10/21 22:00
30409773003	**CO42-PZM004**	Water	03/10/21 09:30	03/10/21 22:00
30409773004	**CO41-PZM036**	Water	03/10/21 10:15	03/10/21 22:00
30409773005	**CO41-PZM001**	Water	03/10/21 11:25	03/10/21 22:00
30409773006	**CO182-MWI**	Water	03/10/21 12:45	03/10/21 22:00
30409773007	**CO24-PZM007**	Water	03/10/21 13:30	03/10/21 22:00
30409773008	**CO23-PZM008**	Water	03/10/21 14:20	03/10/21 22:00
30409773009	**CO56-PZP001**	Water	03/10/21 15:10	03/10/21 22:00

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30409773

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30409773001	**Trip Blank Wt 1**	EPA 8260B	AJC	9	PASI-PA
30409773002	**CO40-PZM008**	EPA 8260B	AJC	9	PASI-PA
30409773003	**CO42-PZM004**	EPA 8260B	AJC	9	PASI-PA
30409773004	**CO41-PZM036**	EPA 8260B	AJC	9	PASI-PA
30409773005	**CO41-PZM001**	EPA 8260B	AJC	9	PASI-PA
30409773006	**CO182-MWI**	EPA 8260B	AJC	9	PASI-PA
30409773007	**CO24-PZM007**	EPA 8260B	AJC	9	PASI-PA
30409773008	**CO23-PZM008**	EPA 8260B	AJC	9	PASI-PA
30409773009	**CO56-PZP001**	EPA 8260B	AJC	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409773

Sample: Trip Blank Wt 1 **Lab ID: 30409773001** Collected: 03/10/21 00:01 Received: 03/10/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		03/15/21 13:57	71-43-2	1c
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		03/15/21 13:57	100-41-4	1c
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		03/15/21 13:57	91-20-3	1c
Toluene	**1.0 U**	ug/L	1.0	0.32	1		03/15/21 13:57	108-88-3	1c
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		03/15/21 13:57	1330-20-7	1c
Surrogates									
4-Bromofluorobenzene (S)	94	%.	70-130		1		03/15/21 13:57	460-00-4	1c
1,2-Dichloroethane-d4 (S)	107	%.	70-130		1		03/15/21 13:57	17060-07-0	1c
Toluene-d8 (S)	97	%.	70-130		1		03/15/21 13:57	2037-26-5	1c
Dibromofluoromethane (S)	102	%.	70-130		1		03/15/21 13:57	1868-53-7	1c

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409773

Sample: CO40-PZM008 **Lab ID: 30409773002** Collected: 03/10/21 08:50 Received: 03/10/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1450**	ug/L	50.0	16.9	50		03/16/21 22:34	71-43-2	
Ethylbenzene	**8.7**	ug/L	1.0	0.40	1		03/16/21 22:08	100-41-4	
Naphthalene	**1220**	ug/L	100	41.0	50		03/16/21 22:34	91-20-3	
Toluene	**197**	ug/L	1.0	0.32	1		03/16/21 22:08	108-88-3	
Xylene (Total)	**68.1**	ug/L	3.0	1.4	1		03/16/21 22:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%.	70-130		1		03/16/21 22:08	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%.	70-130		1		03/16/21 22:08	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		1		03/16/21 22:08	2037-26-5	
Dibromofluoromethane (S)	95	%.	70-130		1		03/16/21 22:08	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409773

Sample: CO42-PZM004 **Lab ID: 30409773003** Collected: 03/10/21 09:30 Received: 03/10/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		03/15/21 14:23	71-43-2	1c
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		03/15/21 14:23	100-41-4	1c
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		03/15/21 14:23	91-20-3	1c
Toluene	**1.0 U**	ug/L	1.0	0.32	1		03/15/21 14:23	108-88-3	1c
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		03/15/21 14:23	1330-20-7	1c
Surrogates									
4-Bromofluorobenzene (S)	94	%.	70-130		1		03/15/21 14:23	460-00-4	1c
1,2-Dichloroethane-d4 (S)	110	%.	70-130		1		03/15/21 14:23	17060-07-0	1c
Toluene-d8 (S)	96	%.	70-130		1		03/15/21 14:23	2037-26-5	1c
Dibromofluoromethane (S)	103	%.	70-130		1		03/15/21 14:23	1868-53-7	1c

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409773

Sample: CO41-PZM036 **Lab ID: 30409773004** Collected: 03/10/21 10:15 Received: 03/10/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**288000**	ug/L	2000	676	2000		03/17/21 19:47	71-43-2	
Ethylbenzene	**628**	ug/L	5.0	2.0	5		03/17/21 00:40	100-41-4	
Naphthalene	**370**	ug/L	10.0	4.1	5		03/17/21 00:40	91-20-3	
Toluene	**168000**	ug/L	1000	317	1000		03/17/21 01:05	108-88-3	
Xylene (Total)	**28300**	ug/L	3000	1350	1000		03/17/21 01:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%.	70-130		5		03/17/21 00:40	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%.	70-130		5		03/17/21 00:40	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		03/17/21 00:40	2037-26-5	
Dibromofluoromethane (S)	76	%.	70-130		5		03/17/21 00:40	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409773

Sample: CO41-PZM001 **Lab ID: 30409773005** Collected: 03/10/21 11:25 Received: 03/10/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**7.3**	ug/L	1.0	0.34	1		03/16/21 18:19	71-43-2	
Ethylbenzene	**0.52J**	ug/L	1.0	0.40	1		03/16/21 18:19	100-41-4	
Naphthalene	**14.3**	ug/L	2.0	0.82	1		03/16/21 18:19	91-20-3	
Toluene	**2.2**	ug/L	1.0	0.32	1		03/16/21 18:19	108-88-3	
Xylene (Total)	**1.4J**	ug/L	3.0	1.4	1		03/16/21 18:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%.	70-130		1		03/16/21 18:19	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%.	70-130		1		03/16/21 18:19	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		1		03/16/21 18:19	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		1		03/16/21 18:19	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409773

Sample: CO182-MWI **Lab ID: 30409773006** Collected: 03/10/21 12:45 Received: 03/10/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**218000**	ug/L	1000	338	1000		03/17/21 19:22	71-43-2	
Ethylbenzene	**322**	ug/L	5.0	2.0	5		03/16/21 23:49	100-41-4	
Naphthalene	**191**	ug/L	10.0	4.1	5		03/16/21 23:49	91-20-3	
Toluene	**45700**	ug/L	1000	317	1000		03/17/21 19:22	108-88-3	
Xylene (Total)	**8870**	ug/L	300	135	100		03/17/21 00:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%.	70-130		5		03/16/21 23:49	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		5		03/16/21 23:49	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		5		03/16/21 23:49	2037-26-5	
Dibromofluoromethane (S)	80	%.	70-130		5		03/16/21 23:49	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409773

Sample: CO24-PZM007 **Lab ID: 30409773007** Collected: 03/10/21 13:30 Received: 03/10/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**2.2**	ug/L	1.0	0.34	1		03/16/21 22:59	71-43-2	
Ethylbenzene	**2.8**	ug/L	1.0	0.40	1		03/16/21 22:59	100-41-4	
Naphthalene	**3780**	ug/L	100	41.0	50		03/16/21 23:24	91-20-3	
Toluene	**1.4**	ug/L	1.0	0.32	1		03/16/21 22:59	108-88-3	
Xylene (Total)	**4.3**	ug/L	3.0	1.4	1		03/16/21 22:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%.	70-130		1		03/16/21 22:59	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		1		03/16/21 22:59	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		1		03/16/21 22:59	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		1		03/16/21 22:59	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409773

Sample: CO23-PZM008 **Lab ID: 30409773008** Collected: 03/10/21 14:20 Received: 03/10/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**489**	ug/L	5.0	1.7	5		03/16/21 21:43	71-43-2	
Ethylbenzene	**25.0**	ug/L	5.0	2.0	5		03/16/21 21:43	100-41-4	
Naphthalene	**4090**	ug/L	100	41.0	50		03/17/21 18:56	91-20-3	
Toluene	**293**	ug/L	5.0	1.6	5		03/16/21 21:43	108-88-3	
Xylene (Total)	**434**	ug/L	15.0	6.8	5		03/16/21 21:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%.	70-130		5		03/16/21 21:43	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%.	70-130		5		03/16/21 21:43	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		5		03/16/21 21:43	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		5		03/16/21 21:43	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409773

Sample: CO56-PZP001 **Lab ID: 30409773009** Collected: 03/10/21 15:10 Received: 03/10/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**237**	ug/L	5.0	1.7	5		03/16/21 17:54	71-43-2	
Ethylbenzene	**9.4**	ug/L	5.0	2.0	5		03/16/21 17:54	100-41-4	
Naphthalene	**2660**	ug/L	100	41.0	50		03/17/21 18:31	91-20-3	
Toluene	**129**	ug/L	5.0	1.6	5		03/16/21 17:54	108-88-3	
Xylene (Total)	**217**	ug/L	15.0	6.8	5		03/16/21 17:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%.	70-130		5		03/16/21 17:54	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%.	70-130		5		03/16/21 17:54	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		5		03/16/21 17:54	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		5		03/16/21 17:54	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30409773

QC Batch: 438675
QC Batch Method: EPA 8260B
Analysis Method: EPA 8260B
Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30409773001, 30409773003

METHOD BLANK: 2117810 Matrix: Water
Associated Lab Samples: 30409773001, 30409773003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	03/15/21 13:31	1c
Ethylbenzene	ug/L	1.0 U	1.0	0.40	03/15/21 13:31	1c
Naphthalene	ug/L	2.0 U	2.0	0.82	03/15/21 13:31	1c
Toluene	ug/L	1.0 U	1.0	0.32	03/15/21 13:31	1c
Xylene (Total)	ug/L	3.0 U	3.0	1.4	03/15/21 13:31	1c
1,2-Dichloroethane-d4 (S)	%.	109	70-130		03/15/21 13:31	1c
4-Bromofluorobenzene (S)	%.	94	70-130		03/15/21 13:31	1c
Dibromofluoromethane (S)	%.	103	70-130		03/15/21 13:31	1c
Toluene-d8 (S)	%.	97	70-130		03/15/21 13:31	1c

LABORATORY CONTROL SAMPLE: 2117811

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.4	102	70-130	1c
Ethylbenzene	ug/L	20	20.5	102	70-130	1c
Naphthalene	ug/L	20	24.5	122	55-160	1c
Toluene	ug/L	20	20.0	100	70-130	1c
Xylene (Total)	ug/L	60	63.3	106	70-130	1c
1,2-Dichloroethane-d4 (S)	%.			107	70-130	1c
4-Bromofluorobenzene (S)	%.			93	70-130	1c
Dibromofluoromethane (S)	%.			99	70-130	1c
Toluene-d8 (S)	%.			97	70-130	1c

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30409773

QC Batch: 438857 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30409773002, 30409773004, 30409773005, 30409773006, 30409773007, 30409773008, 30409773009

METHOD BLANK: 2118642 Matrix: Water
Associated Lab Samples: 30409773002, 30409773004, 30409773005, 30409773006, 30409773007, 30409773008, 30409773009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	03/16/21 17:28	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	03/16/21 17:28	
Naphthalene	ug/L	2.0 U	2.0	0.82	03/16/21 17:28	
Toluene	ug/L	1.0 U	1.0	0.32	03/16/21 17:28	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	03/16/21 17:28	
1,2-Dichloroethane-d4 (S)	%.	104	70-130		03/16/21 17:28	
4-Bromofluorobenzene (S)	%.	95	70-130		03/16/21 17:28	
Dibromofluoromethane (S)	%.	98	70-130		03/16/21 17:28	
Toluene-d8 (S)	%.	100	70-130		03/16/21 17:28	

LABORATORY CONTROL SAMPLE: 2118643

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.0	95	70-130	
Ethylbenzene	ug/L	20	19.6	98	70-130	
Naphthalene	ug/L	20	23.5	118	55-160	
Toluene	ug/L	20	19.6	98	70-130	
Xylene (Total)	ug/L	60	61.3	102	70-130	
1,2-Dichloroethane-d4 (S)	%.			104	70-130	
4-Bromofluorobenzene (S)	%.			94	70-130	
Dibromofluoromethane (S)	%.			101	70-130	
Toluene-d8 (S)	%.			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2118644 2118645

Parameter	Units	30409773009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	237	100	100	321	338	83	100	50-149	5	30	
Ethylbenzene	ug/L	9.4	100	100	90.3	111	81	101	63-135	20	30	
Naphthalene	ug/L	2660	1000	1000	3640	3630	98	98	30-157	0	30	
Toluene	ug/L	129	100	100	210	231	81	102	59-139	9	30	
Xylene (Total)	ug/L	217	300	300	464	531	82	105	63-135	14	30	
1,2-Dichloroethane-d4 (S)	%.						104	101	70-130			
4-Bromofluorobenzene (S)	%.						93	96	70-130			
Dibromofluoromethane (S)	%.						101	100	70-130			
Toluene-d8 (S)	%.						102	100	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30409773

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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: 30409773007

[1] Residual Chlorine was present in the VOA vial used for analysis.

Sample: 30409773009

[1] Residual Chlorine was present in the VOA vial used for analysis.

BATCH QUALIFIERS

Batch: 438675

[1] A matrix spike/matrix spike duplicate was not performed for this batch due to an instrument error

ANALYTE QUALIFIERS

1c A matrix spike/matrix spike duplicate was not performed for this batch due to an instrument error

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30409773

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30409773001	**Trip Blank Wt 1**	EPA 8260B	438675		
30409773002	**CO40-PZM008**	EPA 8260B	438857		
30409773003	**CO42-PZM004**	EPA 8260B	438675		
30409773004	**CO41-PZM036**	EPA 8260B	438857		
30409773005	**CO41-PZM001**	EPA 8260B	438857		
30409773006	**CO182-MWI**	EPA 8260B	438857		
30409773007	**CO24-PZM007**	EPA 8260B	438857		
30409773008	**CO23-PZM008**	EPA 8260B	438857		
30409773009	**CO56-PZP001**	EPA 8260B	438857		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request

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

WO# : 30409773

30409773

Section A Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	20010210
Project Name:	COA
Project Number:	20010210

Section C Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Other	DI Water	Analysis Test Y/N	BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-		3/10/21		—		2				2						X		001
2	C040-PZM008	WT	G				850		3				3						X		002
3	C042-PZM004	WT	G				930		3				3						X		003
4	C041-PZM036	WT	G				1015		3				3						X		004
5	C041-PZM001	WT	G				1125		3				3						X		005
6	C182-MWI	WT	G				1245		3				3						X		006
7	C024-PZM007	WT	G				1330		3				3						X		007
8	C023-PZM008	WT	G				1420		3				3						X		008
9	C056-PZP001	WT	G				1510		3				3						X		009
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No		3/10/21	1550	Pace	3/10/21	1550
Data Validation Required? (Y/N): No	Pace	3/10/21	1811	RDS PACE	3-10-21	1825
If data package is required, attach data package checklist.	RDS PACE	3-10-21	2200	Marion Clancy	3-10-21	2200

Sample Conditions

Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrun

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 3/10/21

*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: Tradepoint Atlantic Project # #30409773

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MCC
LIMS Login MCC

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.1 °C Correction Factor: 0 °C Final Temp: 3.1 °C

Temp should be above freezing to 6°C

pH paper Lot# N/A

Date and Initials of person examining contents: MCC 3/11/2021

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.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.
All containers meet method preservation requirements.	✓			Initial when completed MC; Date/time of preservation; Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: ; Date: ; Survey Meter SN:

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 04, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30422303

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on May 24, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

This project follows the April 5, 2016 revision 3 Quality Assurance Project Plan for Sparrows Point Terminal Site, Sparrows Point, MD prepared for EnviroAnalytics Group and is not for PA DEP compliance reporting.

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30422303

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30422303

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30422303001	**CO30-PZM015**	Water	05/24/21 10:40	05/24/21 23:10
30422303002	**CO30-PZM060**	Water	05/24/21 11:50	05/24/21 23:10
30422303003	**CO201-MWS**	Water	05/24/21 12:45	05/24/21 23:10
30422303004	**CO194-MWS**	Water	05/24/21 13:30	05/24/21 23:10
30422303005	**CO195-MWS**	Water	05/24/21 14:45	05/24/21 23:10
30422303006	**CO196-MWS**	Water	05/24/21 15:00	05/24/21 23:10
30422303007	**Trip Blank Wt 1**	Water	05/24/21 00:00	05/24/21 23:10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30422303

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30422303001	**CO30-PZM015**	EPA 8260B	LEL	9	PASI-PA
30422303002	**CO30-PZM060**	EPA 8260B	LEL	9	PASI-PA
30422303003	**CO201-MWS**	EPA 8260B	LEL	9	PASI-PA
30422303004	**CO194-MWS**	EPA 8260B	LEL	9	PASI-PA
30422303005	**CO195-MWS**	EPA 8260B	LEL	9	PASI-PA
30422303006	**CO196-MWS**	EPA 8260B	LEL	9	PASI-PA
30422303007	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: COA
Pace Project No.: 30422303

Method: **EPA 8260B**
Description: 8260B MSV
Client: Tradepoint Atlantic
Date: June 04, 2021

General Information:
7 samples were analyzed for EPA 8260B by Pace Analytical Services Greensburg. 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.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 450783

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30422529008

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2175535)
  - Benzene
  - Naphthalene
  - Toluene
- MSD (Lab ID: 2175536)
  - Naphthalene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2175536)
  - Naphthalene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: COA
Pace Project No.: 30422303

Method: **EPA 8260B**
Description: 8260B MSV
Client: Tradepoint Atlantic
Date: June 04, 2021

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422303

Sample: CO30-PZM015 **Lab ID: 30422303001** Collected: 05/24/21 10:40 Received: 05/24/21 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**64000**	ug/L	500	169	500		06/02/21 20:25	71-43-2	
Ethylbenzene	**95.2**	ug/L	5.0	2.0	5		06/02/21 20:00	100-41-4	
Naphthalene	**1790**	ug/L	10.0	4.1	5		06/02/21 20:00	91-20-3	
Toluene	**16300**	ug/L	500	158	500		06/02/21 20:25	108-88-3	
Xylene (Total)	**1360**	ug/L	15.0	6.8	5		06/02/21 20:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		5		06/02/21 20:00	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		5		06/02/21 20:00	17060-07-0	
Toluene-d8 (S)	103	%.	70-130		5		06/02/21 20:00	2037-26-5	
Dibromofluoromethane (S)	90	%.	70-130		5		06/02/21 20:00	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422303

Sample: CO30-PZM060 **Lab ID: 30422303002** Collected: 05/24/21 11:50 Received: 05/24/21 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**9.2**	ug/L	1.0	0.34	1		06/02/21 17:03	71-43-2	
Ethylbenzene	**1.9**	ug/L	1.0	0.40	1		06/02/21 17:03	100-41-4	
Naphthalene	**1.3J**	ug/L	2.0	0.82	1		06/02/21 17:03	91-20-3	
Toluene	**23.3**	ug/L	1.0	0.32	1		06/02/21 17:03	108-88-3	
Xylene (Total)	**11.2**	ug/L	3.0	1.4	1		06/02/21 17:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	70-130		1		06/02/21 17:03	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%.	70-130		1		06/02/21 17:03	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		1		06/02/21 17:03	2037-26-5	
Dibromofluoromethane (S)	101	%.	70-130		1		06/02/21 17:03	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422303

Sample: CO201-MWS **Lab ID: 30422303003** Collected: 05/24/21 12:45 Received: 05/24/21 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**2420**	ug/L	10.0	3.4	10		06/02/21 18:44	71-43-2	
Ethylbenzene	**5.3**	ug/L	1.0	0.40	1		06/02/21 18:19	100-41-4	
Naphthalene	**276**	ug/L	2.0	0.82	1		06/02/21 18:19	91-20-3	
Toluene	**266**	ug/L	1.0	0.32	1		06/02/21 18:19	108-88-3	
Xylene (Total)	**93.1**	ug/L	3.0	1.4	1		06/02/21 18:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		1		06/02/21 18:19	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		1		06/02/21 18:19	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		1		06/02/21 18:19	2037-26-5	
Dibromofluoromethane (S)	96	%.	70-130		1		06/02/21 18:19	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422303

Sample: CO194-MWS **Lab ID: 30422303004** Collected: 05/24/21 13:30 Received: 05/24/21 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**800**	ug/L	5.0	1.7	5		06/03/21 15:19	71-43-2	
Ethylbenzene	**4.5J**	ug/L	5.0	2.0	5		06/03/21 15:19	100-41-4	
Naphthalene	**2240**	ug/L	200	81.9	100		06/03/21 15:45	91-20-3	
Toluene	**108**	ug/L	5.0	1.6	5		06/03/21 15:19	108-88-3	
Xylene (Total)	**60.4**	ug/L	15.0	6.8	5		06/03/21 15:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		5		06/03/21 15:19	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		5		06/03/21 15:19	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		06/03/21 15:19	2037-26-5	
Dibromofluoromethane (S)	102	%.	70-130		5		06/03/21 15:19	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422303

Sample: CO195-MWS **Lab ID: 30422303005** Collected: 05/24/21 14:45 Received: 05/24/21 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**18000**	ug/L	50.0	16.9	50		06/02/21 19:35	71-43-2	
Ethylbenzene	**21.8**	ug/L	5.0	2.0	5		06/02/21 19:10	100-41-4	
Naphthalene	**493**	ug/L	10.0	4.1	5		06/02/21 19:10	91-20-3	
Toluene	**1220**	ug/L	5.0	1.6	5		06/02/21 19:10	108-88-3	
Xylene (Total)	**305**	ug/L	15.0	6.8	5		06/02/21 19:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		5		06/02/21 19:10	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		5		06/02/21 19:10	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		5		06/02/21 19:10	2037-26-5	
Dibromofluoromethane (S)	92	%.	70-130		5		06/02/21 19:10	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422303

Sample: CO196-MWS **Lab ID: 30422303006** Collected: 05/24/21 15:00 Received: 05/24/21 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**24400**	ug/L	100	33.8	100		06/03/21 18:54	71-43-2	
Ethylbenzene	**26.7**	ug/L	1.0	0.40	1		06/02/21 17:29	100-41-4	
Naphthalene	**591**	ug/L	20.0	8.2	10		06/02/21 17:54	91-20-3	
Toluene	**1370**	ug/L	10.0	3.2	10		06/02/21 17:54	108-88-3	
Xylene (Total)	**329**	ug/L	3.0	1.4	1		06/02/21 17:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		1		06/02/21 17:29	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		1		06/02/21 17:29	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		1		06/02/21 17:29	2037-26-5	
Dibromofluoromethane (S)	89	%.	70-130		1		06/02/21 17:29	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422303

Sample: Trip Blank Wt 1 **Lab ID: 30422303007** Collected: 05/24/21 00:00 Received: 05/24/21 23:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/02/21 14:06	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/02/21 14:06	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		06/02/21 14:06	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/02/21 14:06	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/02/21 14:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		1		06/02/21 14:06	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%.	70-130		1		06/02/21 14:06	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		1		06/02/21 14:06	2037-26-5	
Dibromofluoromethane (S)	107	%.	70-130		1		06/02/21 14:06	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30422303

QC Batch: 450607 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30422303001, 30422303002, 30422303003, 30422303005, 30422303006, 30422303007

METHOD BLANK: 2174659 Matrix: Water
Associated Lab Samples: 30422303001, 30422303002, 30422303003, 30422303005, 30422303006, 30422303007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/02/21 13:41	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/02/21 13:41	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/02/21 13:41	
Toluene	ug/L	1.0 U	1.0	0.32	06/02/21 13:41	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/02/21 13:41	
1,2-Dichloroethane-d4 (S)	%.	109	70-130		06/02/21 13:41	
4-Bromofluorobenzene (S)	%.	102	70-130		06/02/21 13:41	
Dibromofluoromethane (S)	%.	105	70-130		06/02/21 13:41	
Toluene-d8 (S)	%.	96	70-130		06/02/21 13:41	

LABORATORY CONTROL SAMPLE: 2174660

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.9	94	70-130	
Ethylbenzene	ug/L	20	18.3	91	70-130	
Naphthalene	ug/L	20	12.5	63	55-160	
Toluene	ug/L	20	18.7	94	70-130	
Xylene (Total)	ug/L	60	54.5	91	70-130	
1,2-Dichloroethane-d4 (S)	%.			100	70-130	
4-Bromofluorobenzene (S)	%.			101	70-130	
Dibromofluoromethane (S)	%.			101	70-130	
Toluene-d8 (S)	%.			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2174661 2174662

Parameter	Units	30422309002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	1.0 U	20	20	17.5	16.4	87	82	50-149	6	30	
Ethylbenzene	ug/L	1.0 U	20	20	16.1	15.3	80	76	63-135	5	30	
Naphthalene	ug/L	2.0 U	20	20	11.7	10.6	59	53	30-157	10	30	
Toluene	ug/L	1.0 U	20	20	17.2	15.6	86	78	59-139	10	30	
Xylene (Total)	ug/L	ND	60	60	48.7	45.8	81	76	63-135	6	30	
1,2-Dichloroethane-d4 (S)	%.						104	106	70-130			
4-Bromofluorobenzene (S)	%.						102	102	70-130			
Dibromofluoromethane (S)	%.						100	103	70-130			
Toluene-d8 (S)	%.						98	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30422303

QC Batch: 450783
QC Batch Method: EPA 8260B
Analysis Method: EPA 8260B
Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30422303004

METHOD BLANK: 2175533 Matrix: Water
Associated Lab Samples: 30422303004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/03/21 11:06	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/03/21 11:06	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/03/21 11:06	
Toluene	ug/L	1.0 U	1.0	0.32	06/03/21 11:06	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/03/21 11:06	
1,2-Dichloroethane-d4 (S)	%.	109	70-130		06/03/21 11:06	
4-Bromofluorobenzene (S)	%.	99	70-130		06/03/21 11:06	
Dibromofluoromethane (S)	%.	105	70-130		06/03/21 11:06	
Toluene-d8 (S)	%.	95	70-130		06/03/21 11:06	

LABORATORY CONTROL SAMPLE: 2175534

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.2	96	70-130	
Ethylbenzene	ug/L	20	19.7	98	70-130	
Naphthalene	ug/L	20	13.7	68	55-160	
Toluene	ug/L	20	19.2	96	70-130	
Xylene (Total)	ug/L	60	58.8	98	70-130	
1,2-Dichloroethane-d4 (S)	%.			105	70-130	
4-Bromofluorobenzene (S)	%.			100	70-130	
Dibromofluoromethane (S)	%.			100	70-130	
Toluene-d8 (S)	%.			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2175535 2175536

Parameter	Units	30422529008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	43.6	20	20	44.4	56.2	4	63	50-149	24	30	ML
Ethylbenzene	ug/L	1.9	20	20	20.3	20.9	92	95	63-135	3	30	
Naphthalene	ug/L	409	20	20	212	317	-984	-461	30-157	40	30	ML,R1
Toluene	ug/L	16.8	20	20	28.1	32.1	56	77	59-139	13	30	ML
Xylene (Total)	ug/L	42.4	60	60	80.1	91.0	63	81	63-135	13	30	
1,2-Dichloroethane-d4 (S)	%.						111	110	70-130			
4-Bromofluorobenzene (S)	%.						97	100	70-130			
Dibromofluoromethane (S)	%.						100	107	70-130			
Toluene-d8 (S)	%.						96	96	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30422303

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30422303

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30422303001	**CO30-PZM015**	EPA 8260B	450607		
30422303002	**CO30-PZM060**	EPA 8260B	450607		
30422303003	**CO201-MWS**	EPA 8260B	450607		
30422303004	**CO194-MWS**	EPA 8260B	450783		
30422303005	**CO195-MWS**	EPA 8260B	450607		
30422303006	**CO196-MWS**	EPA 8260B	450607		
30422303007	**Trip Blank Wt 1**	EPA 8260B	450607		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request

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

WO# : 30422303

30422303

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — 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	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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-		5/24/21		-		2				2						X		007
2	~~MW03-PZM-XXX~~	~~WT~~	~~G~~				905		3				3						X		
3	~~MW0104-PZM-XXX~~	~~WT~~	~~G~~				950		3				3						X		
4	CO30-PZM015	WT	G				1040		3				3						X		001
5	CO30-PZM060	WT	G				1150		3				3						X		002
6	CC201-MWS	WT	G				1245		3				3						X		003
7	CO194-MWS	WT	G				1330		3				3						X		004
8	CO195-MWS	WT	G				1415		3				3						X		005
9	CO196-MWS	WT	G				1500		3				3						X		006
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions		
Data Package Required? (Y/N): No		5/24/21	1545		5/24/21	1545			
Data Validation Required? (Y/N) No		5/24/21	1947		5/24/21	1945			
If data package is required, attach data package checklist.		5/24/21	2310		5/24/21	2310	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 5/24/21

Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

Pittsburgh Lab Sample Condition Upon Receipt

Face Analytical

Client Name: Tradepoint Atlantic Project # # 30422303

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label: MM

LIMS Login: MR

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 9 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.9 °C Correction Factor: -.1 °C Final Temp: 3.8 °C

Temp should be above freezing to 6°C

pH paper Lot# N/A Date and Initials of person examining contents: RJ 5-25-21

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 sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix			✓	16.
All containers meet method preservation requirements.	✓			Initial when completed: RJ Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

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®

Pace Greensburg Lab -Sample Container Count

Client Trade Point Atlantic

Site Coq

Profile Number 13367

Notes

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	
1	Cq																					3							
2																													
3																													
4																													
5																													
6																													
7																						2							
8																													
9																													
10																													
11																													
12																													

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unprserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosul
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass Na Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved		

Plastic / Misc.

GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250ml plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag

WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe

30422303

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 04, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30422529

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on May 25, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30422529

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30422529

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30422529001	**CO198-MWS**	Water	05/25/21 09:10	05/25/21 22:30
30422529002	**CO191-MWS**	Water	05/25/21 09:50	05/25/21 22:30
30422529003	**CO190-MWS**	Water	05/25/21 11:00	05/25/21 22:30
30422529004	**CO93-PZM**	Water	05/25/21 11:40	05/25/21 22:30
30422529005	**CO24-PZM007**	Water	05/25/21 12:45	05/25/21 22:30
30422529006	**CO23-PZM008**	Water	05/25/21 13:30	05/25/21 22:30
30422529007	**CO60-PZP001**	Water	05/25/21 14:05	05/25/21 22:30
30422529008	**CO26-PZM007**	Water	05/25/21 14:50	05/25/21 22:30
30422529009	**Trip Blank Wt 1**	Water	05/25/21 00:01	05/25/21 22:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30422529

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30422529001	**CO198-MWS**	EPA 8260B	LEL	9	PASI-PA
30422529002	**CO191-MWS**	EPA 8260B	LEL	9	PASI-PA
30422529003	**CO190-MWS**	EPA 8260B	LEL	9	PASI-PA
30422529004	**CO93-PZM**	EPA 8260B	LEL	9	PASI-PA
30422529005	**CO24-PZM007**	EPA 8260B	LEL	9	PASI-PA
30422529006	**CO23-PZM008**	EPA 8260B	LEL	9	PASI-PA
30422529007	**CO60-PZP001**	EPA 8260B	LEL	9	PASI-PA
30422529008	**CO26-PZM007**	EPA 8260B	LEL	9	PASI-PA
30422529009	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422529

Sample: CO198-MWS **Lab ID: 30422529001** Collected: 05/25/21 09:10 Received: 05/25/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**677**	ug/L	5.0	1.7	5		06/03/21 16:10	71-43-2	
Ethylbenzene	**5.4**	ug/L	5.0	2.0	5		06/03/21 16:10	100-41-4	
Naphthalene	**5590**	ug/L	200	81.9	100		06/03/21 16:35	91-20-3	
Toluene	**115**	ug/L	5.0	1.6	5		06/03/21 16:10	108-88-3	
Xylene (Total)	**62.5**	ug/L	15.0	6.8	5		06/03/21 16:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		5		06/03/21 16:10	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%.	70-130		5		06/03/21 16:10	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		5		06/03/21 16:10	2037-26-5	
Dibromofluoromethane (S)	103	%.	70-130		5		06/03/21 16:10	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422529

Sample: CO191-MWS **Lab ID: 30422529002** Collected: 05/25/21 09:50 Received: 05/25/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**107000**	ug/L	1000	338	1000		06/04/21 13:45	71-43-2	
Ethylbenzene	**243**	ug/L	5.0	2.0	5		06/03/21 17:01	100-41-4	
Naphthalene	**377**	ug/L	10.0	4.1	5		06/03/21 17:01	91-20-3	
Toluene	**19600**	ug/L	100	31.7	100		06/03/21 17:26	108-88-3	
Xylene (Total)	**2730**	ug/L	15.0	6.8	5		06/03/21 17:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	70-130		5		06/03/21 17:01	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%.	70-130		5		06/03/21 17:01	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		06/03/21 17:01	2037-26-5	
Dibromofluoromethane (S)	88	%.	70-130		5		06/03/21 17:01	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422529

Sample: CO190-MWS **Lab ID: 30422529003** Collected: 05/25/21 11:00 Received: 05/25/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**427000**	ug/L	2000	676	2000		06/04/21 14:11	71-43-2	
Ethylbenzene	**40.6**	ug/L	5.0	2.0	5		06/03/21 17:51	100-41-4	
Naphthalene	**74.4**	ug/L	10.0	4.1	5		06/03/21 17:51	91-20-3	
Toluene	**28300**	ug/L	500	158	500		06/03/21 18:16	108-88-3	
Xylene (Total)	**988**	ug/L	15.0	6.8	5		06/03/21 17:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		5		06/03/21 17:51	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%.	70-130		5		06/03/21 17:51	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		5		06/03/21 17:51	2037-26-5	
Dibromofluoromethane (S)	80	%.	70-130		5		06/03/21 17:51	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422529

Sample: CO93-PZM **Lab ID: 30422529004** Collected: 05/25/21 11:40 Received: 05/25/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**181000**	ug/L	1000	338	1000		06/03/21 19:07	71-43-2	
Ethylbenzene	**1050**	ug/L	5.0	2.0	5		06/03/21 18:42	100-41-4	
Naphthalene	**1840**	ug/L	10.0	4.1	5		06/03/21 18:42	91-20-3	
Toluene	**48200**	ug/L	1000	317	1000		06/03/21 19:07	108-88-3	
Xylene (Total)	**10500**	ug/L	3000	1350	1000		06/03/21 19:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		5		06/03/21 18:42	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%.	70-130		5		06/03/21 18:42	17060-07-0	
Toluene-d8 (S)	97	%.	70-130		5		06/03/21 18:42	2037-26-5	
Dibromofluoromethane (S)	84	%.	70-130		5		06/03/21 18:42	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422529

Sample: CO24-PZM007 **Lab ID: 30422529005** Collected: 05/25/21 12:45 Received: 05/25/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**2.9**	ug/L	1.0	0.34	1		06/03/21 12:47	71-43-2	
Ethylbenzene	**1.9**	ug/L	1.0	0.40	1		06/03/21 12:47	100-41-4	
Naphthalene	**1320**	ug/L	100	41.0	50		06/03/21 13:12	91-20-3	
Toluene	**1.9**	ug/L	1.0	0.32	1		06/03/21 12:47	108-88-3	
Xylene (Total)	**3.5**	ug/L	3.0	1.4	1		06/03/21 12:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%.	70-130		1		06/03/21 12:47	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%.	70-130		1		06/03/21 12:47	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		1		06/03/21 12:47	2037-26-5	
Dibromofluoromethane (S)	105	%.	70-130		1		06/03/21 12:47	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422529

Sample: CO23-PZM008 **Lab ID: 30422529006** Collected: 05/25/21 13:30 Received: 05/25/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**567**	ug/L	5.0	1.7	5		06/03/21 14:28	71-43-2	
Ethylbenzene	**31.5**	ug/L	5.0	2.0	5		06/03/21 14:28	100-41-4	
Naphthalene	**2770**	ug/L	100	41.0	50		06/03/21 14:54	91-20-3	
Toluene	**357**	ug/L	5.0	1.6	5		06/03/21 14:28	108-88-3	
Xylene (Total)	**539**	ug/L	15.0	6.8	5		06/03/21 14:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		5		06/03/21 14:28	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		5		06/03/21 14:28	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		06/03/21 14:28	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		5		06/03/21 14:28	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422529

Sample: CO60-PZP001 **Lab ID: 30422529007** Collected: 05/25/21 14:05 Received: 05/25/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**241**	ug/L	1.0	0.34	1		06/03/21 13:38	71-43-2	
Ethylbenzene	**8.8**	ug/L	1.0	0.40	1		06/03/21 13:38	100-41-4	
Naphthalene	**2320**	ug/L	100	41.0	50		06/03/21 14:03	91-20-3	
Toluene	**60.5**	ug/L	1.0	0.32	1		06/03/21 13:38	108-88-3	
Xylene (Total)	**225**	ug/L	3.0	1.4	1		06/03/21 13:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	70-130		1		06/03/21 13:38	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%.	70-130		1		06/03/21 13:38	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		1		06/03/21 13:38	2037-26-5	
Dibromofluoromethane (S)	103	%.	70-130		1		06/03/21 13:38	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422529

Sample: CO26-PZM007 **Lab ID: 30422529008** Collected: 05/25/21 14:50 Received: 05/25/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**43.6**	ug/L	1.0	0.34	1		06/03/21 11:57	71-43-2	ML
Ethylbenzene	**1.9**	ug/L	1.0	0.40	1		06/03/21 11:57	100-41-4	
Naphthalene	**409**	ug/L	20.0	8.2	10		06/03/21 12:22	91-20-3	ML,R1
Toluene	**16.8**	ug/L	1.0	0.32	1		06/03/21 11:57	108-88-3	ML
Xylene (Total)	**42.4**	ug/L	3.0	1.4	1		06/03/21 11:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		06/03/21 11:57	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%.	70-130		1		06/03/21 11:57	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		1		06/03/21 11:57	2037-26-5	
Dibromofluoromethane (S)	104	%.	70-130		1		06/03/21 11:57	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422529

Sample: Trip Blank Wt 1 **Lab ID: 30422529009** Collected: 05/25/21 00:01 Received: 05/25/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/03/21 11:31	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/03/21 11:31	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		06/03/21 11:31	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/03/21 11:31	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/03/21 11:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		1		06/03/21 11:31	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%.	70-130		1		06/03/21 11:31	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		1		06/03/21 11:31	2037-26-5	
Dibromofluoromethane (S)	108	%.	70-130		1		06/03/21 11:31	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30422529

QC Batch: 450783 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30422529001, 30422529002, 30422529003, 30422529004, 30422529005, 30422529006, 30422529007, 30422529008, 30422529009

METHOD BLANK: 2175533 Matrix: Water
Associated Lab Samples: 30422529001, 30422529002, 30422529003, 30422529004, 30422529005, 30422529006, 30422529007, 30422529008, 30422529009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/03/21 11:06	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/03/21 11:06	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/03/21 11:06	
Toluene	ug/L	1.0 U	1.0	0.32	06/03/21 11:06	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/03/21 11:06	
1,2-Dichloroethane-d4 (S)	%.	109	70-130		06/03/21 11:06	
4-Bromofluorobenzene (S)	%.	99	70-130		06/03/21 11:06	
Dibromofluoromethane (S)	%.	105	70-130		06/03/21 11:06	
Toluene-d8 (S)	%.	95	70-130		06/03/21 11:06	

LABORATORY CONTROL SAMPLE: 2175534

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.2	96	70-130	
Ethylbenzene	ug/L	20	19.7	98	70-130	
Naphthalene	ug/L	20	13.7	68	55-160	
Toluene	ug/L	20	19.2	96	70-130	
Xylene (Total)	ug/L	60	58.8	98	70-130	
1,2-Dichloroethane-d4 (S)	%.			105	70-130	
4-Bromofluorobenzene (S)	%.			100	70-130	
Dibromofluoromethane (S)	%.			100	70-130	
Toluene-d8 (S)	%.			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2175535 2175536

Parameter	Units	30422529008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	43.6	20	20	44.4	56.2	4	63	50-149	24	30	ML
Ethylbenzene	ug/L	1.9	20	20	20.3	20.9	92	95	63-135	3	30	
Naphthalene	ug/L	409	20	20	212	317	-984	-461	30-157	40	30	ML,R1
Toluene	ug/L	16.8	20	20	28.1	32.1	56	77	59-139	13	30	ML
Xylene (Total)	ug/L	42.4	60	60	80.1	91.0	63	81	63-135	13	30	
1,2-Dichloroethane-d4 (S)	%.						111	110	70-130			
4-Bromofluorobenzene (S)	%.						97	100	70-130			
Dibromofluoromethane (S)	%.						100	107	70-130			
Toluene-d8 (S)	%.						96	96	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30422529

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30422529

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30422529001	**CO198-MWS**	EPA 8260B	450783		
30422529002	**CO191-MWS**	EPA 8260B	450783		
30422529003	**CO190-MWS**	EPA 8260B	450783		
30422529004	**CO93-PZM**	EPA 8260B	450783		
30422529005	**CO24-PZM007**	EPA 8260B	450783		
30422529006	**CO23-PZM008**	EPA 8260B	450783		
30422529007	**CO60-PZP001**	EPA 8260B	450783		
30422529008	**CO26-PZM007**	EPA 8260B	450783		
30422529009	**Trip Blank Wt 1**	EPA 8260B	450783		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical
www.pacelabs.com

Page: 1 of 1

Section A (Required Client Information)

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B (Required Project Information)

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C (Invoice Information)

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd. Sparrows Point, MD 21219
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location — **STATE:** MD

Requested Analysis Filtered (Y/N)

WO# : 30422529

30422529

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

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	$Na_2S_2O_3$	Other	DI Water	Analysis Test: BTEX and naphthalene via 8260	Residu	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-		5/25/2		-		2				2					X		001 DDG
2	C0198-MWS	WT	G				910		3				3					X		002 001
3	C0191-MWS	WT	G				950		3				3					X		003 002
4	C0190-MWS	WT	G				1100		3				3					X		004 003
5	C093-PZM	WT	G				1140		3				3					X		005 004
6	C024-PZM007	WT	G				1245		3				3					X		006 005
7	C023-PZM008	WT	G				1330		3				3					X		007 006
8	C060-PZP001	WT	G				1405		3				3					X		008 007
9	C026-PZM007	WT	G				1450		3				3					X		009 008
10																				
11																				
12																				

5-26-21

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No		5/25/21	1600		5/25/21	1615
Data Validation Required? (Y/N): No		5/25/21	1900	RDS PACE	525-21	1910
If data package is required, attach data package checklist.	RDS PACE	525-21	2230		5-25-21	2230

Sample Conditions

Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Y		
4.1	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Parrn

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 5/25/21

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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Project #

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

Label RCyn
LIMS Login RCyn

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.6 °C Correction Factor: +0.5 °C Final Temp: 4.1 °C

Temp should be above freezing to 6°C

WO#: 30422529
Due Date: 06/03/21
PM: SMB
CLIENT: TRADEPOINT

Comments:	Yes	No	N/A	pH paper Lot# 10D3801 / Date and Initials of person examining contents: RKL 5/26/21
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 sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: ~~VOA~~, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix			✓	16. 5-26-21
All containers meet method preservation requirements.	✓			Initial when completed RCyn / Date/time of preservation: 5-26-21 1200
				Lot # of added preservative: 5-26-21
Headspace in VOA Vials (>6mm):	✓		✓	17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: / Date: / Survey Meter SN:

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 04, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30422746

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on May 26, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30422746

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30422746

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30422746001	**Trip Blank Wt 1**	Water	05/26/21 00:01	05/26/21 22:30
30422746002	**CO36-PZM008**	Water	05/26/21 09:00	05/26/21 22:30
30422746003	**CO36-PZM043**	Water	05/26/21 10:05	05/26/21 22:30
30422746004	**CP38-PZM006**	Water	05/26/21 10:50	05/26/21 22:30
30422746005	**CP38-PZM043**	Water	05/26/21 12:45	05/26/21 22:30
30422746006	**CO41-PZM001**	Water	05/26/21 13:20	05/26/21 22:30
30422746007	**CO41-PZM036**	Water	05/26/21 14:30	05/26/21 22:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30422746

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30422746001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30422746002	**CO36-PZM008**	EPA 8260B	LEL	9	PASI-PA
30422746003	**CO36-PZM043**	EPA 8260B	LEL	9	PASI-PA
30422746004	**CP38-PZM006**	EPA 8260B	LEL	9	PASI-PA
30422746005	**CP38-PZM043**	EPA 8260B	LEL	9	PASI-PA
30422746006	**CO41-PZM001**	EPA 8260B	LEL	9	PASI-PA
30422746007	**CO41-PZM036**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422746

Sample: Trip Blank Wt 1 **Lab ID: 30422746001** Collected: 05/26/21 00:01 Received: 05/26/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/03/21 12:09	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/03/21 12:09	100-41-4	
Naphthalene	**1.8J**	ug/L	2.0	0.82	1		06/03/21 12:09	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/03/21 12:09	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/03/21 12:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		06/03/21 12:09	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%.	70-130		1		06/03/21 12:09	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		1		06/03/21 12:09	2037-26-5	
Dibromofluoromethane (S)	106	%.	70-130		1		06/03/21 12:09	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422746

Sample: CO36-PZM008 **Lab ID: 30422746002** Collected: 05/26/21 09:00 Received: 05/26/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**38700**	ug/L	500	169	500		06/03/21 16:22	71-43-2	
Ethylbenzene	**61.0**	ug/L	5.0	2.0	5		06/03/21 15:57	100-41-4	
Naphthalene	**540**	ug/L	10.0	4.1	5		06/03/21 15:57	91-20-3	
Toluene	**8940**	ug/L	500	158	500		06/03/21 16:22	108-88-3	
Xylene (Total)	**1250**	ug/L	15.0	6.8	5		06/03/21 15:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	70-130		5		06/03/21 15:57	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%.	70-130		5		06/03/21 15:57	17060-07-0	
Toluene-d8 (S)	97	%.	70-130		5		06/03/21 15:57	2037-26-5	
Dibromofluoromethane (S)	97	%.	70-130		5		06/03/21 15:57	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422746

Sample: CO36-PZM043 **Lab ID: 30422746003** Collected: 05/26/21 10:05 Received: 05/26/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**14100**	ug/L	200	67.6	200		06/03/21 17:13	71-43-2	
Ethylbenzene	**5.3**	ug/L	5.0	2.0	5		06/03/21 16:48	100-41-4	
Naphthalene	**187**	ug/L	10.0	4.1	5		06/03/21 16:48	91-20-3	
Toluene	**841**	ug/L	5.0	1.6	5		06/03/21 16:48	108-88-3	
Xylene (Total)	**287**	ug/L	15.0	6.8	5		06/03/21 16:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		5		06/03/21 16:48	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%.	70-130		5		06/03/21 16:48	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		06/03/21 16:48	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		5		06/03/21 16:48	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422746

Sample: CP38-PZM006 **Lab ID: 30422746004** Collected: 05/26/21 10:50 Received: 05/26/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**4110**	ug/L	50.0	16.9	50		06/03/21 15:32	71-43-2	
Ethylbenzene	**46.1**	ug/L	5.0	2.0	5		06/03/21 15:06	100-41-4	
Naphthalene	**981**	ug/L	10.0	4.1	5		06/03/21 15:06	91-20-3	
Toluene	**800**	ug/L	5.0	1.6	5		06/03/21 15:06	108-88-3	
Xylene (Total)	**373**	ug/L	15.0	6.8	5		06/03/21 15:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		5		06/03/21 15:06	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		5		06/03/21 15:06	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		5		06/03/21 15:06	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		5		06/03/21 15:06	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422746

Sample: CP38-PZM043 **Lab ID: 30422746005** Collected: 05/26/21 12:45 Received: 05/26/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.8**	ug/L	1.0	0.34	1		06/03/21 13:50	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/03/21 13:50	100-41-4	
Naphthalene	**9.4**	ug/L	2.0	0.82	1		06/03/21 13:50	91-20-3	
Toluene	**0.35J**	ug/L	1.0	0.32	1		06/03/21 13:50	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/03/21 13:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		1		06/03/21 13:50	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		1		06/03/21 13:50	17060-07-0	
Toluene-d8 (S)	97	%.	70-130		1		06/03/21 13:50	2037-26-5	
Dibromofluoromethane (S)	103	%.	70-130		1		06/03/21 13:50	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422746

Sample: CO41-PZM001 **Lab ID: 30422746006** Collected: 05/26/21 13:20 Received: 05/26/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1740**	ug/L	50.0	16.9	50		06/04/21 14:36	71-43-2	
Ethylbenzene	**85.8**	ug/L	1.0	0.40	1		06/03/21 14:16	100-41-4	
Naphthalene	**29.3**	ug/L	2.0	0.82	1		06/03/21 14:16	91-20-3	
Toluene	**1200**	ug/L	50.0	15.8	50		06/04/21 14:36	108-88-3	
Xylene (Total)	**760**	ug/L	3.0	1.4	1		06/03/21 14:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		1		06/03/21 14:16	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%.	70-130		1		06/03/21 14:16	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		1		06/03/21 14:16	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		1		06/03/21 14:16	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30422746

Sample: CO41-PZM036 **Lab ID: 30422746007** Collected: 05/26/21 14:30 Received: 05/26/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**283000**	ug/L	2000	676	2000		06/03/21 18:04	71-43-2	
Ethylbenzene	**6.2**	ug/L	5.0	2.0	5		06/03/21 17:39	100-41-4	
Naphthalene	**195**	ug/L	10.0	4.1	5		06/03/21 17:39	91-20-3	
Toluene	**893**	ug/L	5.0	1.6	5		06/03/21 17:39	108-88-3	
Xylene (Total)	**308**	ug/L	15.0	6.8	5		06/03/21 17:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		5		06/03/21 17:39	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%.	70-130		5		06/03/21 17:39	17060-07-0	
Toluene-d8 (S)	97	%.	70-130		5		06/03/21 17:39	2037-26-5	
Dibromofluoromethane (S)	96	%.	70-130		5		06/03/21 17:39	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30422746

QC Batch: 450785 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30422746001, 30422746002, 30422746003, 30422746004, 30422746005, 30422746006, 30422746007

METHOD BLANK: 2175546 Matrix: Water
Associated Lab Samples: 30422746001, 30422746002, 30422746003, 30422746004, 30422746005, 30422746006, 30422746007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/03/21 11:19	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/03/21 11:19	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/03/21 11:19	
Toluene	ug/L	1.0 U	1.0	0.32	06/03/21 11:19	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/03/21 11:19	
1,2-Dichloroethane-d4 (S)	%.	107	70-130		06/03/21 11:19	
4-Bromofluorobenzene (S)	%.	99	70-130		06/03/21 11:19	
Dibromofluoromethane (S)	%.	107	70-130		06/03/21 11:19	
Toluene-d8 (S)	%.	96	70-130		06/03/21 11:19	

LABORATORY CONTROL SAMPLE: 2175547

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.7	98	70-130	
Ethylbenzene	ug/L	20	19.1	95	70-130	
Naphthalene	ug/L	20	13.3	67	55-160	
Toluene	ug/L	20	19.2	96	70-130	
Xylene (Total)	ug/L	60	57.7	96	70-130	
1,2-Dichloroethane-d4 (S)	%.			105	70-130	
4-Bromofluorobenzene (S)	%.			102	70-130	
Dibromofluoromethane (S)	%.			100	70-130	
Toluene-d8 (S)	%.			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2175548 2175549

Parameter	Units	30422553003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	1.0 U	20	20	17.3	16.0	87	80	50-149	8	30	
Ethylbenzene	ug/L	1.0 U	20	20	16.3	14.4	81	72	63-135	12	30	
Naphthalene	ug/L	2.0 U	20	20	11.1	11.7	56	58	30-157	5	30	
Toluene	ug/L	1.0 U	20	20	16.8	14.6	83	73	59-139	13	30	
Xylene (Total)	ug/L	3.0 U	60	60	48.1	43.2	80	72	63-135	11	30	
1,2-Dichloroethane-d4 (S)	%.						106	109	70-130			
4-Bromofluorobenzene (S)	%.						100	101	70-130			
Dibromofluoromethane (S)	%.						101	105	70-130			
Toluene-d8 (S)	%.						96	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30422746

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30422746

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30422746001	**Trip Blank Wt 1**	EPA 8260B	450785		
30422746002	**CO36-PZM008**	EPA 8260B	450785		
30422746003	**CO36-PZM043**	EPA 8260B	450785		
30422746004	**CP38-PZM006**	EPA 8260B	450785		
30422746005	**CP38-PZM043**	EPA 8260B	450785		
30422746006	**CO41-PZM001**	EPA 8260B	450785		
30422746007	**CO41-PZM036**	EPA 8260B	450785		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request

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

WO# : 30422746

30422746

Section A Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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

ITEM #	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	$Na_2S_2O_3$	Other	DI Water	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Wt	-			5/26/21	-		2				2					X		
2	WT	G				900		3				3					X		001
3	WT	G				1005		3				3					X		002
4	WT	G				1050		3				3					X		003
5	WT	G				1245		3				3					X		004
6	WT	G				1320		3				3					X		005
7	WT	G				1430		3				3					X		006
8																			007
9																			
10																			
11																			
12																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No	[signature] ARM	5/26/21	1545	[signature] /PAC	5/26/21	1600
Data Validation Required? (Y/N): No	[signature] /Pace	5/26/21	1900	[signature] PACE	5/26/21	1935
If data package is required, attach data package checklist	[signature] PACE	5/26/21	2230	[signature]	5/26/2021	2230

Sample Conditions

Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 5/26/21

*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-O-020...v.06, 2-F...e-2007

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project # #30422746

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label MLL
LIMS Login ML

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.1 °C Correction Factor: +.5 °C Final Temp: 1.6 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MLL 5/27/2020
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed MLL / Date/time of preservation / Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: / Date: / Survey Meter SN:	

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 08, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30423006

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on May 27, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30423006

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30423006

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30423006001	**Trip Blank Wt 1**	Water	05/27/21 00:01	05/27/21 22:45
30423006002	**CO42-PZM004**	Water	05/27/21 08:55	05/27/21 22:45
30423006003	**CO39-PZM007**	Water	05/27/21 09:55	05/27/21 22:45
30423006004	**CO39-PZM042**	Water	05/27/21 10:35	05/27/21 22:45
30423006005	**CO27-PZM012**	Water	05/27/21 11:40	05/27/21 22:45
30423006006	**CO27-PZM046**	Water	05/27/21 12:20	05/27/21 22:45
30423006007	**CO182-MWI**	Water	05/27/21 13:15	05/27/21 22:45
30423006008	**CO28-PZM048**	Water	05/27/21 14:10	05/27/21 22:45
30423006009	**CO28-PZM010**	Water	05/27/21 15:00	05/27/21 22:45

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30423006

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30423006001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30423006002	**CO42-PZM004**	EPA 8260B	LEL	9	PASI-PA
30423006003	**CO39-PZM007**	EPA 8260B	LEL	9	PASI-PA
30423006004	**CO39-PZM042**	EPA 8260B	LEL	9	PASI-PA
30423006005	**CO27-PZM012**	EPA 8260B	LEL	9	PASI-PA
30423006006	**CO27-PZM046**	EPA 8260B	LEL	9	PASI-PA
30423006007	**CO182-MWI**	EPA 8260B	LEL	9	PASI-PA
30423006008	**CO28-PZM048**	EPA 8260B	LEL	9	PASI-PA
30423006009	**CO28-PZM010**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423006

Sample: Trip Blank Wt 1 **Lab ID: 30423006001** Collected: 05/27/21 00:01 Received: 05/27/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/07/21 15:30	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/07/21 15:30	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		06/07/21 15:30	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/07/21 15:30	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/07/21 15:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%.	70-130		1		06/07/21 15:30	460-00-4	
1,2-Dichloroethane-d4 (S)	120	%.	70-130		1		06/07/21 15:30	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		1		06/07/21 15:30	2037-26-5	
Dibromofluoromethane (S)	114	%.	70-130		1		06/07/21 15:30	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423006

Sample: CO42-PZM004 **Lab ID: 30423006002** Collected: 05/27/21 08:55 Received: 05/27/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**15.9**	ug/L	1.0	0.34	1		06/04/21 13:20	71-43-2	
Ethylbenzene	**4.3**	ug/L	1.0	0.40	1		06/04/21 13:20	100-41-4	
Naphthalene	**9.3**	ug/L	2.0	0.82	1		06/04/21 13:20	91-20-3	
Toluene	**24.4**	ug/L	1.0	0.32	1		06/04/21 13:20	108-88-3	ML
Xylene (Total)	**37.2**	ug/L	3.0	1.4	1		06/04/21 13:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		1		06/04/21 13:20	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%.	70-130		1		06/04/21 13:20	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		1		06/04/21 13:20	2037-26-5	
Dibromofluoromethane (S)	105	%.	70-130		1		06/04/21 13:20	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423006

Sample: CO39-PZM007 **Lab ID: 30423006003** Collected: 05/27/21 09:55 Received: 05/27/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**3120**	ug/L	50.0	16.9	50		06/07/21 20:36	71-43-2	
Ethylbenzene	**6.9**	ug/L	5.0	2.0	5		06/04/21 15:02	100-41-4	
Naphthalene	**353**	ug/L	10.0	4.1	5		06/04/21 15:02	91-20-3	
Toluene	**487**	ug/L	5.0	1.6	5		06/04/21 15:02	108-88-3	
Xylene (Total)	**58.0**	ug/L	15.0	6.8	5		06/04/21 15:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		5		06/04/21 15:02	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%.	70-130		5		06/04/21 15:02	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		5		06/04/21 15:02	2037-26-5	
Dibromofluoromethane (S)	101	%.	70-130		5		06/04/21 15:02	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423006

Sample: CO39-PZM042 **Lab ID: 30423006004** Collected: 05/27/21 10:35 Received: 05/27/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**12000**	ug/L	50.0	16.9	50		06/04/21 16:18	71-43-2	
Ethylbenzene	**68.0**	ug/L	5.0	2.0	5		06/04/21 15:53	100-41-4	
Naphthalene	**1270**	ug/L	10.0	4.1	5		06/04/21 15:53	91-20-3	
Toluene	**3150**	ug/L	50.0	15.8	50		06/04/21 16:18	108-88-3	
Xylene (Total)	**624**	ug/L	15.0	6.8	5		06/04/21 15:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	70-130		5		06/04/21 15:53	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%.	70-130		5		06/04/21 15:53	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		06/04/21 15:53	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		5		06/04/21 15:53	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423006

Sample: CO27-PZM012 **Lab ID: 30423006005** Collected: 05/27/21 11:40 Received: 05/27/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**9230**	ug/L	2000	676	2000		06/04/21 17:09	71-43-2	
Ethylbenzene	**64.5**	ug/L	5.0	2.0	5		06/04/21 16:44	100-41-4	
Naphthalene	**383**	ug/L	10.0	4.1	5		06/04/21 16:44	91-20-3	
Toluene	**2680**	ug/L	2000	634	2000		06/04/21 17:09	108-88-3	
Xylene (Total)	**777**	ug/L	15.0	6.8	5		06/04/21 16:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		5		06/04/21 16:44	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%.	70-130		5		06/04/21 16:44	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		5		06/04/21 16:44	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		5		06/04/21 16:44	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423006

Sample: CO27-PZM046 **Lab ID: 30423006006** Collected: 05/27/21 12:20 Received: 05/27/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**15600**	ug/L	100	33.8	100		06/07/21 21:51	71-43-2	
Ethylbenzene	**202**	ug/L	1.0	0.40	1		06/04/21 12:04	100-41-4	
Naphthalene	**847**	ug/L	200	81.9	100		06/07/21 21:51	91-20-3	
Toluene	**5560**	ug/L	100	31.7	100		06/07/21 21:51	108-88-3	
Xylene (Total)	**1460**	ug/L	300	135	100		06/07/21 21:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%.	70-130		1		06/04/21 12:04	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%.	70-130		1		06/04/21 12:04	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		1		06/04/21 12:04	2037-26-5	
Dibromofluoromethane (S)	90	%.	70-130		1		06/04/21 12:04	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423006

Sample: CO182-MWI **Lab ID: 30423006007** Collected: 05/27/21 13:15 Received: 05/27/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**362000**	ug/L	1000	338	1000		06/04/21 18:25	71-43-2	
Ethylbenzene	**1020**	ug/L	5.0	2.0	5		06/04/21 17:35	100-41-4	
Naphthalene	**153**	ug/L	10.0	4.1	5		06/04/21 17:35	91-20-3	
Toluene	**60400**	ug/L	1000	317	1000		06/04/21 18:25	108-88-3	
Xylene (Total)	**12600**	ug/L	300	135	100		06/04/21 18:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		5		06/04/21 17:35	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%.	70-130		5		06/04/21 17:35	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		5		06/04/21 17:35	2037-26-5	
Dibromofluoromethane (S)	80	%.	70-130		5		06/04/21 17:35	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423006

Sample: CO28-PZM048 **Lab ID: 30423006008** Collected: 05/27/21 14:10 Received: 05/27/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**128000**	ug/L	500	169	500		06/07/21 21:26	71-43-2	
Ethylbenzene	**290**	ug/L	5.0	2.0	5		06/04/21 15:27	100-41-4	
Naphthalene	**2750**	ug/L	100	41.0	50		06/07/21 21:01	91-20-3	
Toluene	**5670**	ug/L	50.0	15.8	50		06/07/21 21:01	108-88-3	
Xylene (Total)	**5850**	ug/L	150	67.5	50		06/07/21 21:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		5		06/04/21 15:27	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%.	70-130		5		06/04/21 15:27	17060-07-0	
Toluene-d8 (S)	97	%.	70-130		5		06/04/21 15:27	2037-26-5	
Dibromofluoromethane (S)	89	%.	70-130		5		06/04/21 15:27	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423006

Sample: CO28-PZM010 **Lab ID: 30423006009** Collected: 05/27/21 15:00 Received: 05/27/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0**	ug/L	1.0	0.34	1		06/07/21 16:47	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/07/21 16:47	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		06/07/21 16:47	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/07/21 16:47	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/07/21 16:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		1		06/07/21 16:47	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%.	70-130		1		06/07/21 16:47	17060-07-0	
Toluene-d8 (S)	93	%.	70-130		1		06/07/21 16:47	2037-26-5	
Dibromofluoromethane (S)	113	%.	70-130		1		06/07/21 16:47	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30423006

QC Batch: 451002 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30423006002, 30423006003, 30423006004, 30423006005, 30423006006, 30423006007, 30423006008

METHOD BLANK: 2176529 Matrix: Water
Associated Lab Samples: 30423006002, 30423006003, 30423006004, 30423006005, 30423006006, 30423006007, 30423006008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/04/21 11:39	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/04/21 11:39	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/04/21 11:39	
Toluene	ug/L	1.0 U	1.0	0.32	06/04/21 11:39	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/04/21 11:39	
1,2-Dichloroethane-d4 (S)	%.	111	70-130		06/04/21 11:39	
4-Bromofluorobenzene (S)	%.	99	70-130		06/04/21 11:39	
Dibromofluoromethane (S)	%.	109	70-130		06/04/21 11:39	
Toluene-d8 (S)	%.	94	70-130		06/04/21 11:39	

LABORATORY CONTROL SAMPLE: 2176530

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.8	94	70-130	
Ethylbenzene	ug/L	20	18.5	92	70-130	
Naphthalene	ug/L	20	12.7	63	55-160	
Toluene	ug/L	20	18.6	93	70-130	
Xylene (Total)	ug/L	60	55.5	92	70-130	
1,2-Dichloroethane-d4 (S)	%.			104	70-130	
4-Bromofluorobenzene (S)	%.			99	70-130	
Dibromofluoromethane (S)	%.			101	70-130	
Toluene-d8 (S)	%.			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2176934 2176935

Parameter	Units	30423006002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	15.9	20	20	30.8	28.6	74	63	50-149	7	30	
Ethylbenzene	ug/L	4.3	20	20	20.5	20.0	81	78	63-135	2	30	
Naphthalene	ug/L	9.3	20	20	20.0	18.6	54	46	30-157	7	30	
Toluene	ug/L	24.4	20	20	37.9	33.0	68	43	59-139	14	30	ML
Xylene (Total)	ug/L	37.2	60	60	86.1	82.3	81	75	63-135	4	30	
1,2-Dichloroethane-d4 (S)	%.						108	111	70-130			
4-Bromofluorobenzene (S)	%.						97	102	70-130			
Dibromofluoromethane (S)	%.						110	103	70-130			
Toluene-d8 (S)	%.						94	96	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30423006

QC Batch: 451224
QC Batch Method: EPA 8260B
Analysis Method: EPA 8260B
Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30423006001, 30423006009

METHOD BLANK: 2178091 Matrix: Water
Associated Lab Samples: 30423006001, 30423006009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/07/21 13:23	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/07/21 13:23	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/07/21 13:23	
Toluene	ug/L	1.0 U	1.0	0.32	06/07/21 13:23	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/07/21 13:23	
1,2-Dichloroethane-d4 (S)	%.	112	70-130		06/07/21 13:23	
4-Bromofluorobenzene (S)	%.	101	70-130		06/07/21 13:23	
Dibromofluoromethane (S)	%.	109	70-130		06/07/21 13:23	
Toluene-d8 (S)	%.	94	70-130		06/07/21 13:23	

LABORATORY CONTROL SAMPLE: 2178092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.7	103	70-130	
Ethylbenzene	ug/L	20	21.4	107	70-130	
Naphthalene	ug/L	20	15.0	75	55-160	
Toluene	ug/L	20	20.7	103	70-130	
Xylene (Total)	ug/L	60	63.7	106	70-130	
1,2-Dichloroethane-d4 (S)	%.			112	70-130	
4-Bromofluorobenzene (S)	%.			95	70-130	
Dibromofluoromethane (S)	%.			99	70-130	
Toluene-d8 (S)	%.			94	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2178093 2178094

Parameter	Units	30423541001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	16.6	17.2	83	86	50-149	4	30	
Ethylbenzene	ug/L	ND	20	20	16.3	16.8	81	84	63-135	3	30	
Naphthalene	ug/L	ND	20	20	10.1	10.6	50	53	30-157	5	30	
Toluene	ug/L	ND	20	20	15.7	16.8	78	84	59-139	7	30	
Xylene (Total)	ug/L	ND	60	60	48.2	50.4	80	84	63-135	4	30	
1,2-Dichloroethane-d4 (S)	%.						109	112	70-130			
4-Bromofluorobenzene (S)	%.						97	99	70-130			
Dibromofluoromethane (S)	%.						107	103	70-130			
Toluene-d8 (S)	%.						91	93	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30423006

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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

ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30423006

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30423006001	**Trip Blank Wt 1**	EPA 8260B	451224		
30423006002	**CO42-PZM004**	EPA 8260B	451002		
30423006003	**CO39-PZM007**	EPA 8260B	451002		
30423006004	**CO39-PZM042**	EPA 8260B	451002		
30423006005	**CO27-PZM012**	EPA 8260B	451002		
30423006006	**CO27-PZM046**	EPA 8260B	451002		
30423006007	**CO182-MWI**	EPA 8260B	451002		
30423006008	**CO28-PZM048**	EPA 8260B	451002		
30423006009	**CO28-PZM010**	EPA 8260B	451224		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 30423006

30423006

Section A Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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	$Na_2S_2O_3$	Other	DI Water	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-			5/27/21	-		2				2					X		001
2	C042-PZM004	WT	G				855		3				3					X		OOR
3	C039-PZM007	WT	G				955		3				3					X		003
4	C039-PZM042	WT	G				1035		3				3					X		004
5	C027-PZM012	WT	G				1140		3				3					X		005
6	C027-PZM046	WT	G				1220		3				3					X		006
7	C0182-MW1	WT	G				1315		3				3					X		007
8	C028-PZM048	WT	G				1410		3				3					X		008
9	C028-PZM010	WT	G				1500		3				3					X		009
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No						
Data Validation Required? (Y/N): No	ARM	5/27/21	1600	Pace	5/27/21	1625
If data package is required, attach data package checklist.	Pace	5/27/21	1850	RDS Pace	5-27-21	1900
	RDS Pace	5-27-21	2245	Marlow Lang	5-27-2021	2245

Sample Conditions

Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Y		
Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: Lisa Perrin

DATE Signed (MM/DD/YY): 5/27/21

*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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project # #30423006

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label MLC
LIMS Login ML

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.0 °C Correction Factor: +.5 °C Final Temp: 1.5 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: ML 5/28/2021
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed ML Date/time of preservation	
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date:	Survey Meter SN:

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 08, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30423830

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on June 02, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30423830

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30423830

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30423830001	**Trip blank Wt 1**	Water	06/02/21 00:00	06/02/21 23:00
30423830002	**CO56-PZP001**	Water	06/02/21 11:00	06/02/21 23:00
30423830003	**CO55-PZM000**	Water	06/02/21 14:40	06/02/21 23:00

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30423830

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30423830001	**Trip blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30423830002	**CO56-PZP001**	EPA 8260B	LEL	9	PASI-PA
30423830003	**CO55-PZM000**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423830

Sample: Trip blank Wt 1 **Lab ID: 30423830001** Collected: 06/02/21 00:00 Received: 06/02/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/07/21 16:21	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/07/21 16:21	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		06/07/21 16:21	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/07/21 16:21	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/07/21 16:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%.	70-130		1		06/07/21 16:21	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%.	70-130		1		06/07/21 16:21	17060-07-0	
Toluene-d8 (S)	93	%.	70-130		1		06/07/21 16:21	2037-26-5	
Dibromofluoromethane (S)	117	%.	70-130		1		06/07/21 16:21	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423830

Sample: CO56-PZP001 **Lab ID: 30423830002** Collected: 06/02/21 11:00 Received: 06/02/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**208**	ug/L	5.0	1.7	5		06/07/21 19:45	71-43-2	
Ethylbenzene	**8.5**	ug/L	5.0	2.0	5		06/07/21 19:45	100-41-4	
Naphthalene	**1970**	ug/L	10.0	4.1	5		06/07/21 19:45	91-20-3	
Toluene	**108**	ug/L	5.0	1.6	5		06/07/21 19:45	108-88-3	
Xylene (Total)	**176**	ug/L	15.0	6.8	5		06/07/21 19:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%.	70-130		5		06/07/21 19:45	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%.	70-130		5		06/07/21 19:45	17060-07-0	
Toluene-d8 (S)	92	%.	70-130		5		06/07/21 19:45	2037-26-5	
Dibromofluoromethane (S)	109	%.	70-130		5		06/07/21 19:45	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30423830

Sample: CO55-PZM000 **Lab ID: 30423830003** Collected: 06/02/21 14:40 Received: 06/02/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/07/21 18:28	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/07/21 18:28	100-41-4	
Naphthalene	**11.8**	ug/L	2.0	0.82	1		06/07/21 18:28	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/07/21 18:28	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/07/21 18:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		1		06/07/21 18:28	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%.	70-130		1		06/07/21 18:28	17060-07-0	
Toluene-d8 (S)	92	%.	70-130		1		06/07/21 18:28	2037-26-5	
Dibromofluoromethane (S)	114	%.	70-130		1		06/07/21 18:28	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30423830

QC Batch: 451224 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30423830001, 30423830002, 30423830003

METHOD BLANK: 2178091 Matrix: Water
Associated Lab Samples: 30423830001, 30423830002, 30423830003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/07/21 13:23	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/07/21 13:23	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/07/21 13:23	
Toluene	ug/L	1.0 U	1.0	0.32	06/07/21 13:23	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/07/21 13:23	
1,2-Dichloroethane-d4 (S)	%.	112	70-130		06/07/21 13:23	
4-Bromofluorobenzene (S)	%.	101	70-130		06/07/21 13:23	
Dibromofluoromethane (S)	%.	109	70-130		06/07/21 13:23	
Toluene-d8 (S)	%.	94	70-130		06/07/21 13:23	

LABORATORY CONTROL SAMPLE: 2178092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.7	103	70-130	
Ethylbenzene	ug/L	20	21.4	107	70-130	
Naphthalene	ug/L	20	15.0	75	55-160	
Toluene	ug/L	20	20.7	103	70-130	
Xylene (Total)	ug/L	60	63.7	106	70-130	
1,2-Dichloroethane-d4 (S)	%.			112	70-130	
4-Bromofluorobenzene (S)	%.			95	70-130	
Dibromofluoromethane (S)	%.			99	70-130	
Toluene-d8 (S)	%.			94	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2178093 2178094

Parameter	Units	30423541001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	16.6	17.2	83	86	50-149	4	30	
Ethylbenzene	ug/L	ND	20	20	16.3	16.8	81	84	63-135	3	30	
Naphthalene	ug/L	ND	20	20	10.1	10.6	50	53	30-157	5	30	
Toluene	ug/L	ND	20	20	15.7	16.8	78	84	59-139	7	30	
Xylene (Total)	ug/L	ND	60	60	48.2	50.4	80	84	63-135	4	30	
1,2-Dichloroethane-d4 (S)	%.						109	112	70-130			
4-Bromofluorobenzene (S)	%.						97	99	70-130			
Dibromofluoromethane (S)	%.						107	103	70-130			
Toluene-d8 (S)	%.						91	93	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30423830

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30423830

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30423830001	**Trip blank Wt 1**	EPA 8260B	451224		
30423830002	**CO56-PZP001**	EPA 8260B	451224		
30423830003	**CO55-PZM000**	EPA 8260B	451224		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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: (of (

Section A — **Required** Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B — **Required** Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	20020210
Project Name:	COA
Project Number:	20010210

Section C — Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-			6/2/21	-		2				2						X		OOI
2	C056-PZP008	WT	G				1100		3				3						X		002
3	C055-PZM008	WT	G				1440		3				3						X		003
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions: Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Data Package Required? (Y/N): No		6/2/21		PACE	6/2/21	1600			
Data Validation Required? (Y/N): No	PACE	6/2/21	1800	PACE	6/2/21	1857		X	
If data package is required, attach data package	PACE	6-2-21	2300		6-2-21	2300	S.B	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrun

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 6/2/21

...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

WO# : 30423830

30423830

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Project #

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

Label # 3042383O
LIMS Login

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 5.3 °C Correction Factor: 0.5 °C Final Temp: 5.8 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# n/a / Date and Initials of person examining contents: 6321
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 sample field filtered			–	13.
Organic Samples checked for dechlorination:			–	14.
Filtered volume received for Dissolved tests			–	15.
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		–		16.
All containers meet method preservation requirements.	–			Initial when completed: JL Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		–		17.
Trip Blank Present:	–			18.
Trip Blank Custody Seals Present	–			
Rad Samples Screened < 0.5 mrem/hr			–	Initial when completed: JL Date: 6321 Survey Meter SN:

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®

Pace Greensburg Lab -Sample Container Count

Client: tradepoint

Site: Cou

Profile Number: 13369

Notes:

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	
1	wt																					2							
2	↓																					3							
3																						3							
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unprserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosul
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass Na Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserve
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved		

Plastic / Misc.

GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250ml plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag

WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe

30423830

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 11, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30424012

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on June 03, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30424012

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30424012

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30424012001	**Trip Blank**	Water	06/03/21 00:01	06/03/21 23:30
30424012002	**CO209-MWS**	Water	06/03/21 08:25	06/03/21 23:30
30424012003	**CO209-MWI**	Water	06/03/21 10:30	06/03/21 23:30
30424012004	**CO180-MWI**	Water	06/03/21 11:55	06/03/21 23:30
30424012005	**CO180-MWS**	Water	06/03/21 13:15	06/03/21 23:30
30424012006	**CO58-PZM001**	Water	06/03/21 14:20	06/03/21 23:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30424012

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30424012001	**Trip Blank**	EPA 8260B	LEL	9	PASI-PA
30424012002	**CO209-MWS**	EPA 8260B	LEL	9	PASI-PA
30424012003	**CO209-MWI**	EPA 8260B	LEL	9	PASI-PA
30424012004	**CO180-MWI**	EPA 8260B	LEL	9	PASI-PA
30424012005	**CO180-MWS**	EPA 8260B	LEL	9	PASI-PA
30424012006	**CO58-PZM001**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424012

Sample: Trip Blank **Lab ID: 30424012001** Collected: 06/03/21 00:01 Received: 06/03/21 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/10/21 14:50	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/10/21 14:50	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		06/10/21 14:50	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/10/21 14:50	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/10/21 14:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		1		06/10/21 14:50	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%.	70-130		1		06/10/21 14:50	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		1		06/10/21 14:50	2037-26-5	
Dibromofluoromethane (S)	104	%.	70-130		1		06/10/21 14:50	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424012

Sample: CO209-MWS **Lab ID: 30424012002** Collected: 06/03/21 08:25 Received: 06/03/21 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**12.7**	ug/L	5.0	1.7	5		06/10/21 17:24	71-43-2	
Ethylbenzene	**2.1J**	ug/L	5.0	2.0	5		06/10/21 17:24	100-41-4	
Naphthalene	**3940**	ug/L	400	164	200		06/10/21 17:49	91-20-3	
Toluene	**5.2**	ug/L	5.0	1.6	5		06/10/21 17:24	108-88-3	
Xylene (Total)	**18.8**	ug/L	15.0	6.8	5		06/10/21 17:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	70-130		5		06/10/21 17:24	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		5		06/10/21 17:24	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		5		06/10/21 17:24	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		5		06/10/21 17:24	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424012

Sample: CO209-MWI **Lab ID: 30424012003** Collected: 06/03/21 10:30 Received: 06/03/21 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1120**	ug/L	5.0	1.7	5		06/10/21 18:15	71-43-2	
Ethylbenzene	**45.2**	ug/L	5.0	2.0	5		06/10/21 18:15	100-41-4	
Naphthalene	**11100**	ug/L	400	164	200		06/10/21 18:40	91-20-3	
Toluene	**2.6J**	ug/L	5.0	1.6	5		06/10/21 18:15	108-88-3	
Xylene (Total)	**32.3**	ug/L	15.0	6.8	5		06/10/21 18:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	70-130		5		06/10/21 18:15	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		5		06/10/21 18:15	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		5		06/10/21 18:15	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		5		06/10/21 18:15	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424012

Sample: CO180-MWI **Lab ID: 30424012004** Collected: 06/03/21 11:55 Received: 06/03/21 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**39700**	ug/L	200	67.6	200		06/10/21 20:22	71-43-2	
Ethylbenzene	**159**	ug/L	5.0	2.0	5		06/10/21 19:57	100-41-4	
Naphthalene	**2540**	ug/L	400	164	200		06/10/21 20:22	91-20-3	
Toluene	**8700**	ug/L	200	63.4	200		06/10/21 20:22	108-88-3	
Xylene (Total)	**2690**	ug/L	15.0	6.8	5		06/10/21 19:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		5		06/10/21 19:57	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		5		06/10/21 19:57	17060-07-0	
Toluene-d8 (S)	104	%.	70-130		5		06/10/21 19:57	2037-26-5	
Dibromofluoromethane (S)	91	%.	70-130		5		06/10/21 19:57	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424012

Sample: CO180-MWS **Lab ID: 30424012005** Collected: 06/03/21 13:15 Received: 06/03/21 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**786**	ug/L	5.0	1.7	5		06/10/21 19:31	71-43-2	
Ethylbenzene	**3.7J**	ug/L	5.0	2.0	5		06/10/21 19:31	100-41-4	
Naphthalene	**62.7**	ug/L	10.0	4.1	5		06/10/21 19:31	91-20-3	
Toluene	**180**	ug/L	5.0	1.6	5		06/10/21 19:31	108-88-3	
Xylene (Total)	**54.5**	ug/L	15.0	6.8	5		06/10/21 19:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	70-130		5		06/10/21 19:31	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%.	70-130		5		06/10/21 19:31	17060-07-0	
Toluene-d8 (S)	98	%.	70-130		5		06/10/21 19:31	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		5		06/10/21 19:31	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424012

Sample: CO58-PZM001 **Lab ID: 30424012006** Collected: 06/03/21 14:20 Received: 06/03/21 23:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**122**	ug/L	1.0	0.34	1		06/10/21 16:33	71-43-2	
Ethylbenzene	**6.3**	ug/L	1.0	0.40	1		06/10/21 16:33	100-41-4	
Naphthalene	**1350**	ug/L	100	41.0	50		06/10/21 16:58	91-20-3	
Toluene	**27.8**	ug/L	1.0	0.32	1		06/10/21 16:33	108-88-3	
Xylene (Total)	**101**	ug/L	3.0	1.4	1		06/10/21 16:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%.	70-130		1		06/10/21 16:33	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%.	70-130		1		06/10/21 16:33	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		1		06/10/21 16:33	2037-26-5	
Dibromofluoromethane (S)	97	%.	70-130		1		06/10/21 16:33	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30424012

QC Batch: 451908 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30424012001, 30424012002, 30424012003, 30424012004, 30424012005, 30424012006

METHOD BLANK: 2181094 Matrix: Water
Associated Lab Samples: 30424012001, 30424012002, 30424012003, 30424012004, 30424012005, 30424012006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/10/21 14:24	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/10/21 14:24	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/10/21 14:24	
Toluene	ug/L	1.0 U	1.0	0.32	06/10/21 14:24	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/10/21 14:24	
1,2-Dichloroethane-d4 (S)	%.	99	70-130		06/10/21 14:24	
4-Bromofluorobenzene (S)	%.	101	70-130		06/10/21 14:24	
Dibromofluoromethane (S)	%.	101	70-130		06/10/21 14:24	
Toluene-d8 (S)	%.	97	70-130		06/10/21 14:24	

LABORATORY CONTROL SAMPLE: 2181095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	17.9	89	70-130	
Ethylbenzene	ug/L	20	19.2	96	70-130	
Naphthalene	ug/L	20	20.0	100	55-160	
Toluene	ug/L	20	18.1	90	70-130	
Xylene (Total)	ug/L	60	57.2	95	70-130	
1,2-Dichloroethane-d4 (S)	%.			93	70-130	
4-Bromofluorobenzene (S)	%.			103	70-130	
Dibromofluoromethane (S)	%.			105	70-130	
Toluene-d8 (S)	%.			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2181526 2181527

Parameter	Units	30424012006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	122	20	20	135	137	64	78	50-149	2	30	
Ethylbenzene	ug/L	6.3	20	20	25.1	26.5	94	101	63-135	5	30	
Naphthalene	ug/L	1350	1000	1000	2270	2440	92	109	30-157	7	30	
Toluene	ug/L	27.8	20	20	45.4	45.6	88	89	59-139	1	30	
Xylene (Total)	ug/L	101	60	60	152	161	85	101	63-135	6	30	
1,2-Dichloroethane-d4 (S)	%.						98	96	70-130			
4-Bromofluorobenzene (S)	%.						103	106	70-130			
Dibromofluoromethane (S)	%.						97	102	70-130			
Toluene-d8 (S)	%.						101	101	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30424012

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30424012

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30424012001	**Trip Blank**	EPA 8260B	451908		
30424012002	**CO209-MWS**	EPA 8260B	451908		
30424012003	**CO209-MWI**	EPA 8260B	451908		
30424012004	**CO180-MWI**	EPA 8260B	451908		
30424012005	**CO180-MWS**	EPA 8260B	451908		
30424012006	**CO58-PZM001**	EPA 8260B	451908		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Dr

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

WO# : 30424012

30424012

Section A
Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B
Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C
Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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

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	$Na_2S_2O_3$	Other	DI Water	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
	Requested Analysis Filtered (Y/N)																Y/N →		
1	Trip Blank Wt 1	Wt	-		6/3/21		-		2				2				X		001
2	CO209-MWS	WT	G				825		3				3				X		002
3	CO209-MWI	WT	G				1030		3				3				X		003
4	CO180-MWI	WT	G				1155		3				3				X		004
5	CO180-MWS	WT	G				1315		3				3				X		005
6	CO58-PZM001	WT	G				1420		3				3				X		006
7																			
8																			
9																			
10																			
11																			
12									17										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No		6/3/21	1530			
Data Validation Required? (Y/N): No			1915	RDS PACE	6-3-21	2000
If data package is required, attach data package checklist.		6/3/21	2330	Received (Lobby)	6/3/21	2330

Sample Conditions		
X		
Y	N	Y
Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perry

SIGNATURE of SAMPLER: Lisa Perry

DATE Signed (MM/DD/YY): 6/3/21

*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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project # #30424012

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MC
LIMS Login MC

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp .06 °C Correction Factor: 0 °C Final Temp: .06 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MC 6/4/2021
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed MC	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

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 15, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30424443

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on June 07, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30424443

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30424443

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30424443001	**Trip Blank**	Water	06/07/21 00:01	06/07/21 22:33
30424443002	**CO37-PZM038**	Water	06/07/21 10:15	06/07/21 22:33
30424443003	**CO37-PZM003**	Water	06/07/21 11:20	06/07/21 22:33
30424443004	**CO181-MWI**	Water	06/07/21 13:00	06/07/21 22:33
30424443005	**CO181-MWS**	Water	06/07/21 13:50	06/07/21 22:33
30424443006	**CO186-MWS**	Water	06/07/21 15:00	06/07/21 22:33

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30424443

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30424443001	**Trip Blank**	EPA 8260B	LEL	9	PASI-PA
30424443002	**CO37-PZM038**	EPA 8260B	LEL	9	PASI-PA
30424443003	**CO37-PZM003**	EPA 8260B	LEL	9	PASI-PA
30424443004	**CO181-MWI**	EPA 8260B	LEL	9	PASI-PA
30424443005	**CO181-MWS**	EPA 8260B	LEL	9	PASI-PA
30424443006	**CO186-MWS**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424443

Sample: Trip Blank **Lab ID: 30424443001** Collected: 06/07/21 00:01 Received: 06/07/21 22:33 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/12/21 15:00	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/12/21 15:00	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		06/12/21 15:00	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/12/21 15:00	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/12/21 15:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		06/12/21 15:00	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		1		06/12/21 15:00	17060-07-0	
Toluene-d8 (S)	97	%.	70-130		1		06/12/21 15:00	2037-26-5	
Dibromofluoromethane (S)	105	%.	70-130		1		06/12/21 15:00	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424443

Sample: CO37-PZM038 **Lab ID: 30424443002** Collected: 06/07/21 10:15 Received: 06/07/21 22:33 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**16000**	ug/L	200	67.6	200		06/12/21 20:33	71-43-2	
Ethylbenzene	**268**	ug/L	5.0	2.0	5		06/12/21 20:07	100-41-4	
Naphthalene	**1850**	ug/L	10.0	4.1	5		06/12/21 20:07	91-20-3	
Toluene	**8240**	ug/L	200	63.4	200		06/12/21 20:33	108-88-3	
Xylene (Total)	**2320**	ug/L	15.0	6.8	5		06/12/21 20:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		5		06/12/21 20:07	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		5		06/12/21 20:07	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		5		06/12/21 20:07	2037-26-5	
Dibromofluoromethane (S)	90	%.	70-130		5		06/12/21 20:07	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424443

Sample: CO37-PZM003 **Lab ID: 30424443003** Collected: 06/07/21 11:20 Received: 06/07/21 22:33 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**7120**	ug/L	50.0	16.9	50		06/12/21 17:08	71-43-2	
Ethylbenzene	**133**	ug/L	1.0	0.40	1		06/12/21 16:43	100-41-4	
Naphthalene	**1270**	ug/L	100	41.0	50		06/12/21 17:08	91-20-3	
Toluene	**3000**	ug/L	50.0	15.8	50		06/12/21 17:08	108-88-3	
Xylene (Total)	**1310**	ug/L	150	67.5	50		06/12/21 17:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		1		06/12/21 16:43	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		1		06/12/21 16:43	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		1		06/12/21 16:43	2037-26-5	
Dibromofluoromethane (S)	91	%.	70-130		1		06/12/21 16:43	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424443

Sample: CO181-MWI **Lab ID: 30424443004** Collected: 06/07/21 13:00 Received: 06/07/21 22:33 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**9870**	ug/L	50.0	16.9	50		06/12/21 17:59	71-43-2	
Ethylbenzene	**71.5**	ug/L	1.0	0.40	1		06/12/21 17:34	100-41-4	
Naphthalene	**1320**	ug/L	100	41.0	50		06/12/21 17:59	91-20-3	
Toluene	**2920**	ug/L	50.0	15.8	50		06/12/21 17:59	108-88-3	
Xylene (Total)	**1180**	ug/L	150	67.5	50		06/12/21 17:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	108	%.	70-130		1		06/12/21 17:34	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%.	70-130		1		06/12/21 17:34	17060-07-0	
Toluene-d8 (S)	104	%.	70-130		1		06/12/21 17:34	2037-26-5	
Dibromofluoromethane (S)	79	%.	70-130		1		06/12/21 17:34	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424443

Sample: CO181-MWS **Lab ID: 30424443005** Collected: 06/07/21 13:50 Received: 06/07/21 22:33 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**28400**	ug/L	500	169	500		06/14/21 12:40	71-43-2	
Ethylbenzene	**145**	ug/L	1.0	0.40	1		06/12/21 18:25	100-41-4	
Naphthalene	**3710**	ug/L	100	41.0	50		06/12/21 18:50	91-20-3	
Toluene	**5810**	ug/L	50.0	15.8	50		06/12/21 18:50	108-88-3	
Xylene (Total)	**1920**	ug/L	150	67.5	50		06/12/21 18:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		1		06/12/21 18:25	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		1		06/12/21 18:25	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		1		06/12/21 18:25	2037-26-5	
Dibromofluoromethane (S)	82	%.	70-130		1		06/12/21 18:25	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424443

Sample: CO186-MWS **Lab ID: 30424443006** Collected: 06/07/21 15:00 Received: 06/07/21 22:33 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**47100**	ug/L	500	169	500		06/14/21 13:05	71-43-2	
Ethylbenzene	**119**	ug/L	1.0	0.40	1		06/12/21 19:16	100-41-4	
Naphthalene	**31.7**	ug/L	2.0	0.82	1		06/12/21 19:16	91-20-3	
Toluene	**14600**	ug/L	50.0	15.8	50		06/12/21 19:42	108-88-3	
Xylene (Total)	**2140**	ug/L	150	67.5	50		06/12/21 19:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		06/12/21 19:16	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		1		06/12/21 19:16	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		1		06/12/21 19:16	2037-26-5	
Dibromofluoromethane (S)	79	%.	70-130		1		06/12/21 19:16	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30424443

QC Batch: 452196 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30424443001, 30424443002, 30424443003, 30424443004, 30424443005, 30424443006

METHOD BLANK: 2183078 Matrix: Water
Associated Lab Samples: 30424443001, 30424443002, 30424443003, 30424443004, 30424443005, 30424443006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/12/21 14:10	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/12/21 14:10	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/12/21 14:10	
Toluene	ug/L	1.0 U	1.0	0.32	06/12/21 14:10	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/12/21 14:10	
1,2-Dichloroethane-d4 (S)	%.	101	70-130		06/12/21 14:10	
4-Bromofluorobenzene (S)	%.	100	70-130		06/12/21 14:10	
Dibromofluoromethane (S)	%.	100	70-130		06/12/21 14:10	
Toluene-d8 (S)	%.	100	70-130		06/12/21 14:10	

LABORATORY CONTROL SAMPLE: 2183079

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.1	95	70-130	
Ethylbenzene	ug/L	20	19.6	98	70-130	
Naphthalene	ug/L	20	20.8	104	55-160	
Toluene	ug/L	20	19.2	96	70-130	
Xylene (Total)	ug/L	60	58.8	98	70-130	
1,2-Dichloroethane-d4 (S)	%.			94	70-130	
4-Bromofluorobenzene (S)	%.			101	70-130	
Dibromofluoromethane (S)	%.			96	70-130	
Toluene-d8 (S)	%.			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2183080 2183081

Parameter	Units	30424667002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	10	20	20	28.9	28.1	94	91	50-149	3	30	
Ethylbenzene	ug/L	1.0 U	20	20	18.8	18.2	94	91	63-135	3	30	
Naphthalene	ug/L	2.0 U	20	20	18.5	18.0	89	86	30-157	2	30	
Toluene	ug/L	1.0 U	20	20	17.9	17.6	90	88	59-139	2	30	
Xylene (Total)	ug/L	3.0 U	60	60	56.7	54.0	94	90	63-135	5	30	
1,2-Dichloroethane-d4 (S)	%.						94	96	70-130			
4-Bromofluorobenzene (S)	%.						101	102	70-130			
Dibromofluoromethane (S)	%.						99	94	70-130			
Toluene-d8 (S)	%.						99	99	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30424443

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30424443

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30424443001	**Trip Blank**	EPA 8260B	452196		
30424443002	**CO37-PZM038**	EPA 8260B	452196		
30424443003	**CO37-PZM003**	EPA 8260B	452196		
30424443004	**CO181-MWI**	EPA 8260B	452196		
30424443005	**CO181-MWS**	EPA 8260B	452196		
30424443006	**CO186-MWS**	EPA 8260B	452196		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request

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

WO# : 30424443

30424443

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	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

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	$Na_2S_2O_3$	Other	DI Water	Requested Analysis Filtered (Y/N)	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-			6/7/21	-		2				2						X		001
2	C037-PZM038	WT	G				1015		3				3						X		002
3	C037-PZM003	WT	G				1120		3				3						X		003
4	C0181-~~BE~~MW1	WT	G				1300		3				3						X		004
5	C0181-MW5	WT	G				1350		3				3						X		005
6	C0186-MW5	WT	G				1500		3				3						X		006
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions		
Data Package Required? (Y/N): No		6/7/21	1605		6/7/21	1605			
Data Validation Required? (Y/N): No		6/7/21	1905		6/7/21	1912			
If data package is required, attach data package checklist.		6/7/21	2233		6-7-2021	2233	N/A Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 6/7/21

Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic

Project # #-30424443

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label: Mic

LIMS Login: MH

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used: 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp: 3.9 °C Correction Factor: 0 °C Final Temp: 3.9 °C

Temp should be above freezing to 6°C

pH paper Lot#: N/A

Date and Initials of person examining contents: MH 6/8/2021

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 sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.
All containers meet method preservation requirements.	✓			Initial when completed: Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

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 15, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30424667

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on June 08, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30424667

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30424667

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30424667001	**Trip Blank Wt 1**	Water	06/08/21 00:01	06/08/21 22:10
30424667002	**GD01-MWI**	Water	06/08/21 11:00	06/08/21 22:10
30424667003	**GD02-MWI**	Water	06/08/21 12:45	06/08/21 22:10
30424667004	**CO40-PZM008**	Water	06/08/21 14:10	06/08/21 22:10

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30424667

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30424667001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30424667002	**GD01-MWI**	EPA 8260B	LEL	9	PASI-PA
30424667003	**GD02-MWI**	EPA 8260B	LEL	9	PASI-PA
30424667004	**CO40-PZM008**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424667

Sample: Trip Blank Wt 1 **Lab ID: 30424667001** Collected: 06/08/21 00:01 Received: 06/08/21 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/12/21 15:26	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/12/21 15:26	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		06/12/21 15:26	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/12/21 15:26	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/12/21 15:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		06/12/21 15:26	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		1		06/12/21 15:26	17060-07-0	
Toluene-d8 (S)	98	%.	70-130		1		06/12/21 15:26	2037-26-5	
Dibromofluoromethane (S)	104	%.	70-130		1		06/12/21 15:26	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424667

Sample: GD01-MWI **Lab ID: 30424667002** Collected: 06/08/21 11:00 Received: 06/08/21 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**10**	ug/L	1.0	0.34	1		06/12/21 14:35	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/12/21 14:35	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		06/12/21 14:35	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/12/21 14:35	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/12/21 14:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		1		06/12/21 14:35	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		1		06/12/21 14:35	17060-07-0	
Toluene-d8 (S)	97	%.	70-130		1		06/12/21 14:35	2037-26-5	
Dibromofluoromethane (S)	101	%.	70-130		1		06/12/21 14:35	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424667

Sample: GD02-MWI **Lab ID: 30424667003** Collected: 06/08/21 12:45 Received: 06/08/21 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**78200**	ug/L	500	169	500		06/12/21 21:24	71-43-2	
Ethylbenzene	**452**	ug/L	5.0	2.0	5		06/12/21 20:58	100-41-4	
Naphthalene	**1840**	ug/L	10.0	4.1	5		06/12/21 20:58	91-20-3	
Toluene	**24.0**	ug/L	5.0	1.6	5		06/12/21 20:58	108-88-3	
Xylene (Total)	**575**	ug/L	15.0	6.8	5		06/12/21 20:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		5		06/12/21 20:58	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		5		06/12/21 20:58	17060-07-0	
Toluene-d8 (S)	104	%.	70-130		5		06/12/21 20:58	2037-26-5	
Dibromofluoromethane (S)	86	%.	70-130		5		06/12/21 20:58	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30424667

Sample: CO40-PZM008 **Lab ID: 30424667004** Collected: 06/08/21 14:10 Received: 06/08/21 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**5050**	ug/L	50.0	16.9	50		06/12/21 16:17	71-43-2	
Ethylbenzene	**61.3**	ug/L	1.0	0.40	1		06/12/21 15:52	100-41-4	
Naphthalene	**2260**	ug/L	100	41.0	50		06/12/21 16:17	91-20-3	
Toluene	**712**	ug/L	50.0	15.8	50		06/12/21 16:17	108-88-3	
Xylene (Total)	**367**	ug/L	3.0	1.4	1		06/12/21 15:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		06/12/21 15:52	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%.	70-130		1		06/12/21 15:52	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		1		06/12/21 15:52	2037-26-5	
Dibromofluoromethane (S)	91	%.	70-130		1		06/12/21 15:52	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30424667

QC Batch: 452196 | Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B | Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30424667001, 30424667002, 30424667003, 30424667004

METHOD BLANK: 2183078 Matrix: Water
Associated Lab Samples: 30424667001, 30424667002, 30424667003, 30424667004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/12/21 14:10	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/12/21 14:10	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/12/21 14:10	
Toluene	ug/L	1.0 U	1.0	0.32	06/12/21 14:10	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/12/21 14:10	
1,2-Dichloroethane-d4 (S)	%.	101	70-130		06/12/21 14:10	
4-Bromofluorobenzene (S)	%.	100	70-130		06/12/21 14:10	
Dibromofluoromethane (S)	%.	100	70-130		06/12/21 14:10	
Toluene-d8 (S)	%.	100	70-130		06/12/21 14:10	

LABORATORY CONTROL SAMPLE: 2183079

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.1	95	70-130	
Ethylbenzene	ug/L	20	19.6	98	70-130	
Naphthalene	ug/L	20	20.8	104	55-160	
Toluene	ug/L	20	19.2	96	70-130	
Xylene (Total)	ug/L	60	58.8	98	70-130	
1,2-Dichloroethane-d4 (S)	%.			94	70-130	
4-Bromofluorobenzene (S)	%.			101	70-130	
Dibromofluoromethane (S)	%.			96	70-130	
Toluene-d8 (S)	%.			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2183080 2183081

Parameter	Units	30424667002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	10	20	20	28.9	28.1	94	91	50-149	3	30	
Ethylbenzene	ug/L	1.0 U	20	20	18.8	18.2	94	91	63-135	3	30	
Naphthalene	ug/L	2.0 U	20	20	18.5	18.0	89	86	30-157	2	30	
Toluene	ug/L	1.0 U	20	20	17.9	17.6	90	88	59-139	2	30	
Xylene (Total)	ug/L	3.0 U	60	60	56.7	54.0	94	90	63-135	5	30	
1,2-Dichloroethane-d4 (S)	%.						94	96	70-130			
4-Bromofluorobenzene (S)	%.						101	102	70-130			
Dibromofluoromethane (S)	%.						99	94	70-130			
Toluene-d8 (S)	%.						99	99	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30424667

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30424667

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30424667001	**Trip Blank Wt 1**	EPA 8260B	452196		
30424667002	**GD01-MWI**	EPA 8260B	452196		
30424667003	**GD02-MWI**	EPA 8260B	452196		
30424667004	**CO40-PZM008**	EPA 8260B	452196		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request

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

WO# : 30424667

30424667

Section A — **Required** Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B — **Required** Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C — Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location — **STATE:** MD

Requested Analysis Filtered (Y/N)

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

ITEM #	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	$Na_2S_2O_3$	Other	DI Water	Analysis Test Y/N	BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Wt	-			6/8/21	-		2				2						X		
2	WT	G				1100		3				3						X		001
3	WT	G				1245		3				3						X		002
4	WT	G				1410		3				3						X		003
5																				004
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No	ARM	6/8/21	1547	PAC	6/8/21	1547
Data Validation Required? (Y/N): No	PAC	6/8/21	1800	PACE	6/8/21	1810
If data package is required, attach data package checklist.	PACE	6/8/21	2210	Marvin I (Ma)	6-8-2021	2210

Sample Conditions

Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Y		
Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 6/8/21

*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

#_30424667

Pace Analytical

Client Name: Tradepoint Atlantic Project #

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

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp .9 °C Correction Factor: 0 °C Final Temp: .9 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MLL 6/9/2021
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed MLL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

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 15, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30425020

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on June 09, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30425020

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30425020

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30425020001	**Trip Blank**	Water	06/09/21 00:01	06/09/21 22:15
30425020002	**CO71-PZM006**	Water	06/09/21 10:20	06/09/21 22:15
30425020003	**CO70-PZM005**	Water	06/09/21 10:50	06/09/21 22:15
30425020004	**CO69-PZM005**	Water	06/09/21 11:25	06/09/21 22:15
30425020005	**CO67-PZM006**	Water	06/09/21 12:15	06/09/21 22:15
30425020006	**CO66-PZM005**	Water	06/09/21 12:40	06/09/21 22:15
30425020007	**CO65-PZM005**	Water	06/09/21 13:30	06/09/21 22:15
30425020008	**CO64-PZM006**	Water	06/09/21 13:50	06/09/21 22:15
30425020009	**CO63-PZM007**	Water	06/09/21 14:15	06/09/21 22:15
30425020010	**CO61-PZM007**	Water	06/09/21 15:20	06/09/21 22:15

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30425020

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30425020001	**Trip Blank**	EPA 8260B	LEL	9	PASI-PA
30425020002	**CO71-PZM006**	EPA 8260B	LEL	9	PASI-PA
30425020003	**CO70-PZM005**	EPA 8260B	LEL	9	PASI-PA
30425020004	**CO69-PZM005**	EPA 8260B	LEL	9	PASI-PA
30425020005	**CO67-PZM006**	EPA 8260B	LEL	9	PASI-PA
30425020006	**CO66-PZM005**	EPA 8260B	LEL	9	PASI-PA
30425020007	**CO65-PZM005**	EPA 8260B	LEL	9	PASI-PA
30425020008	**CO64-PZM006**	EPA 8260B	LEL	9	PASI-PA
30425020009	**CO63-PZM007**	EPA 8260B	LEL	9	PASI-PA
30425020010	**CO61-PZM007**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425020

Sample: Trip Blank **Lab ID: 30425020001** Collected: 06/09/21 00:01 Received: 06/09/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/12/21 15:13	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/12/21 15:13	100-41-4	
Naphthalene	**0.82J**	ug/L	2.0	0.82	1		06/12/21 15:13	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/12/21 15:13	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/12/21 15:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	70-130		1		06/12/21 15:13	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		1		06/12/21 15:13	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		1		06/12/21 15:13	2037-26-5	
Dibromofluoromethane (S)	104	%.	70-130		1		06/12/21 15:13	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425020

Sample: CO71-PZM006 **Lab ID: 30425020002** Collected: 06/09/21 10:20 Received: 06/09/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**9.3**	ug/L	1.0	0.34	1		06/12/21 14:48	71-43-2	
Ethylbenzene	**0.68J**	ug/L	1.0	0.40	1		06/12/21 14:48	100-41-4	
Naphthalene	**30.1**	ug/L	2.0	0.82	1		06/12/21 14:48	91-20-3	
Toluene	**3.9**	ug/L	1.0	0.32	1		06/12/21 14:48	108-88-3	
Xylene (Total)	**10.1**	ug/L	3.0	1.4	1		06/12/21 14:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	70-130		1		06/12/21 14:48	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		1		06/12/21 14:48	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		1		06/12/21 14:48	2037-26-5	
Dibromofluoromethane (S)	105	%.	70-130		1		06/12/21 14:48	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425020

Sample: CO70-PZM005 **Lab ID: 30425020003** Collected: 06/09/21 10:50 Received: 06/09/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**8.1**	ug/L	1.0	0.34	1		06/12/21 15:39	71-43-2	
Ethylbenzene	**0.64J**	ug/L	1.0	0.40	1		06/12/21 15:39	100-41-4	
Naphthalene	**54.0**	ug/L	2.0	0.82	1		06/12/21 15:39	91-20-3	
Toluene	**3.9**	ug/L	1.0	0.32	1		06/12/21 15:39	108-88-3	
Xylene (Total)	**7.4**	ug/L	3.0	1.4	1		06/12/21 15:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		1		06/12/21 15:39	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		1		06/12/21 15:39	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		1		06/12/21 15:39	2037-26-5	
Dibromofluoromethane (S)	107	%.	70-130		1		06/12/21 15:39	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425020

Sample: CO69-PZM005 **Lab ID: 30425020004** Collected: 06/09/21 11:25 Received: 06/09/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**4.4**	ug/L	1.0	0.34	1		06/12/21 17:21	71-43-2	
Ethylbenzene	**1.0**	ug/L	1.0	0.40	1		06/12/21 17:21	100-41-4	
Naphthalene	**88.7**	ug/L	2.0	0.82	1		06/12/21 17:21	91-20-3	
Toluene	**3.7**	ug/L	1.0	0.32	1		06/12/21 17:21	108-88-3	
Xylene (Total)	**16.2**	ug/L	3.0	1.4	1		06/12/21 17:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	111	%.	70-130		1		06/12/21 17:21	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%.	70-130		1		06/12/21 17:21	17060-07-0	
Toluene-d8 (S)	102	%.	70-130		1		06/12/21 17:21	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		06/12/21 17:21	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425020

Sample: CO67-PZM006 **Lab ID: 30425020005** Collected: 06/09/21 12:15 Received: 06/09/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**295**	ug/L	1.0	0.34	1		06/12/21 16:30	71-43-2	
Ethylbenzene	**14.2**	ug/L	1.0	0.40	1		06/12/21 16:30	100-41-4	
Naphthalene	**5390**	ug/L	40.0	16.4	20		06/12/21 16:56	91-20-3	
Toluene	**187**	ug/L	1.0	0.32	1		06/12/21 16:30	108-88-3	
Xylene (Total)	**319**	ug/L	3.0	1.4	1		06/12/21 16:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	70-130		1		06/12/21 16:30	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		1		06/12/21 16:30	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		1		06/12/21 16:30	2037-26-5	
Dibromofluoromethane (S)	97	%.	70-130		1		06/12/21 16:30	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425020

Sample: CO66-PZM005 **Lab ID: 30425020006** Collected: 06/09/21 12:40 Received: 06/09/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**302**	ug/L	5.0	1.7	5		06/12/21 16:05	71-43-2	
Ethylbenzene	**11.8**	ug/L	5.0	2.0	5		06/12/21 16:05	100-41-4	
Naphthalene	**2310**	ug/L	100	41.0	50		06/14/21 22:40	91-20-3	
Toluene	**161**	ug/L	5.0	1.6	5		06/12/21 16:05	108-88-3	
Xylene (Total)	**246**	ug/L	15.0	6.8	5		06/12/21 16:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		5		06/12/21 16:05	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%.	70-130		5		06/12/21 16:05	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		5		06/12/21 16:05	2037-26-5	
Dibromofluoromethane (S)	101	%.	70-130		5		06/12/21 16:05	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425020

Sample: CO65-PZM005 **Lab ID: 30425020007** Collected: 06/09/21 13:30 Received: 06/09/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**310**	ug/L	5.0	1.7	5		06/12/21 19:03	71-43-2	
Ethylbenzene	**13.2**	ug/L	5.0	2.0	5		06/12/21 19:03	100-41-4	
Naphthalene	**4850**	ug/L	100	41.0	50		06/12/21 19:29	91-20-3	
Toluene	**188**	ug/L	5.0	1.6	5		06/12/21 19:03	108-88-3	
Xylene (Total)	**289**	ug/L	15.0	6.8	5		06/12/21 19:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		5		06/12/21 19:03	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		5		06/12/21 19:03	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		5		06/12/21 19:03	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		5		06/12/21 19:03	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425020

Sample: CO64-PZM006 **Lab ID: 30425020008** Collected: 06/09/21 13:50 Received: 06/09/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**246**	ug/L	5.0	1.7	5		06/12/21 19:54	71-43-2	
Ethylbenzene	**12.0**	ug/L	5.0	2.0	5		06/12/21 19:54	100-41-4	
Naphthalene	**2990**	ug/L	100	41.0	50		06/12/21 20:20	91-20-3	
Toluene	**128**	ug/L	5.0	1.6	5		06/12/21 19:54	108-88-3	
Xylene (Total)	**206**	ug/L	15.0	6.8	5		06/12/21 19:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		5		06/12/21 19:54	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%.	70-130		5		06/12/21 19:54	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		5		06/12/21 19:54	2037-26-5	
Dibromofluoromethane (S)	97	%.	70-130		5		06/12/21 19:54	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425020

Sample: CO63-PZM007 **Lab ID: 30425020009** Collected: 06/09/21 14:15 Received: 06/09/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**191**	ug/L	5.0	1.7	5		06/12/21 20:45	71-43-2	
Ethylbenzene	**9.3**	ug/L	5.0	2.0	5		06/12/21 20:45	100-41-4	
Naphthalene	**1180**	ug/L	10.0	4.1	5		06/12/21 20:45	91-20-3	
Toluene	**98.6**	ug/L	5.0	1.6	5		06/12/21 20:45	108-88-3	
Xylene (Total)	**153**	ug/L	15.0	6.8	5		06/12/21 20:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	108	%.	70-130		5		06/12/21 20:45	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%.	70-130		5		06/12/21 20:45	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		5		06/12/21 20:45	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		5		06/12/21 20:45	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425020

Sample: CO61-PZM007 **Lab ID: 30425020010** Collected: 06/09/21 15:20 Received: 06/09/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**264**	ug/L	1.0	0.34	1		06/12/21 18:12	71-43-2	
Ethylbenzene	**13.9**	ug/L	1.0	0.40	1		06/12/21 18:12	100-41-4	
Naphthalene	**7430**	ug/L	100	41.0	50		06/12/21 18:38	91-20-3	
Toluene	**91.9**	ug/L	1.0	0.32	1		06/12/21 18:12	108-88-3	
Xylene (Total)	**202**	ug/L	3.0	1.4	1		06/12/21 18:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		1		06/12/21 18:12	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%.	70-130		1		06/12/21 18:12	17060-07-0	
Toluene-d8 (S)	103	%.	70-130		1		06/12/21 18:12	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		1		06/12/21 18:12	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30425020

QC Batch: 452197 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30425020001, 30425020002, 30425020003, 30425020004, 30425020005, 30425020006, 30425020007, 30425020008, 30425020009, 30425020010

METHOD BLANK: 2183082 Matrix: Water
Associated Lab Samples: 30425020001, 30425020002, 30425020003, 30425020004, 30425020005, 30425020006, 30425020007, 30425020008, 30425020009, 30425020010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/12/21 14:22	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/12/21 14:22	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/12/21 14:22	
Toluene	ug/L	1.0 U	1.0	0.32	06/12/21 14:22	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/12/21 14:22	
1,2-Dichloroethane-d4 (S)	%.	101	70-130		06/12/21 14:22	
4-Bromofluorobenzene (S)	%.	106	70-130		06/12/21 14:22	
Dibromofluoromethane (S)	%.	100	70-130		06/12/21 14:22	
Toluene-d8 (S)	%.	100	70-130		06/12/21 14:22	

LABORATORY CONTROL SAMPLE: 2183083

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.4	97	70-130	
Ethylbenzene	ug/L	20	20.2	101	70-130	
Naphthalene	ug/L	20	23.0	115	55-160	
Toluene	ug/L	20	19.9	99	70-130	
Xylene (Total)	ug/L	60	60.6	101	70-130	
1,2-Dichloroethane-d4 (S)	%.			98	70-130	
4-Bromofluorobenzene (S)	%.			105	70-130	
Dibromofluoromethane (S)	%.			98	70-130	
Toluene-d8 (S)	%.			103	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2183084 2183085

Parameter	Units	30425020002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	9.3	20	20	26.3	26.6	85	86	50-149	1	30	
Ethylbenzene	ug/L	0.68J	20	20	19.4	19.6	94	95	63-135	1	30	
Naphthalene	ug/L	30.1	20	20	48.9	52.0	94	110	30-157	6	30	
Toluene	ug/L	3.9	20	20	21.9	21.7	90	89	59-139	1	30	
Xylene (Total)	ug/L	10.1	60	60	66.3	66.0	94	93	63-135	0	30	
1,2-Dichloroethane-d4 (S)	%.						102	101	70-130			
4-Bromofluorobenzene (S)	%.						100	103	70-130			
Dibromofluoromethane (S)	%.						99	100	70-130			
Toluene-d8 (S)	%.						100	101	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30425020

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30425020

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30425020001	**Trip Blank**	EPA 8260B	452197		
30425020002	**CO71-PZM006**	EPA 8260B	452197		
30425020003	**CO70-PZM005**	EPA 8260B	452197		
30425020004	**CO69-PZM005**	EPA 8260B	452197		
30425020005	**CO67-PZM006**	EPA 8260B	452197		
30425020006	**CO66-PZM005**	EPA 8260B	452197		
30425020007	**CO65-PZM005**	EPA 8260B	452197		
30425020008	**CO64-PZM006**	EPA 8260B	452197		
30425020009	**CO63-PZM007**	EPA 8260B	452197		
30425020010	**CO61-PZM007**	EPA 8260B	452197		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 30425020

30425020

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Requested Analysis Filtered (Y/N)

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

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	$Na_2S_2O_3$	Other	DI Water	Analysis Test Y/N: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-			6/9/21	-		2				2					X		001
2	C071-PZM006	WT	G				1020		3				3					X		002
3	C070-PZM005	WT	G				1050		3				3					X		003
4	C069-PZM005	WT	G				1125		3				3					X		004
5	C067-PZM006	WT	G				1215		3				3					X		005
6	C066-PZM005	WT	G				1240		3				3					X		006
7	C065-PZM005	WT	G				1330		3				3					X		007
8	C064-PZM006	WT	G				1350		3				3					X		008
9	C063-PZM007	WT	G				1415		3				3					X		009
10	C061-PZM007	WT	G				1520		3				3					X		010
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions: Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (N/A)
Data Package Required? (Y/N): No		6/9/21	1600	/PACE	6/9/21	1600			
Data Validation Required? (Y/N): No	/PACE	6/9/21	1845	RDS PACE	6-9-21	1848	Y		
If data package is required, attach data package checklist.	RDS PACE	6/9/21	2215	Marissa Liang	6/9/2021	2215	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrun

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 6/9/21

*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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project #: #30425020

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label: ML
LIMS Login: ML

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used: 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp: 3.3 °C Correction Factor: -.1 °C Final Temp: 3.2 °C

Temp should be above freezing to 6°C

pH paper Lot#: N/A Date and Initials of person examining contents: ML 6/9/2021

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 sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.
All containers meet method preservation requirements.	✓			Initial when completed: ML Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

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 18, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30425341

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on June 10, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30425341

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30425341

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30425341001	**Trip Blank**	Water	06/10/21 00:01	06/10/21 22:30
30425341002	**CO43-PZM048**	Water	06/10/21 12:15	06/10/21 22:30
30425341003	**CO44-PZM048**	Water	06/10/21 12:40	06/10/21 22:30
30425341004	**CO45-PZM047**	Water	06/10/21 13:20	06/10/21 22:30
30425341005	**CO46-PZM047**	Water	06/10/21 13:50	06/10/21 22:30
30425341006	**CO47-PZM046**	Water	06/10/21 14:30	06/10/21 22:30
30425341007	**CO48-PZM044**	Water	06/10/21 15:00	06/10/21 22:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30425341

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30425341001	**Trip Blank**	EPA 8260B	LEL	9	PASI-PA
30425341002	**CO43-PZM048**	EPA 8260B	LEL	9	PASI-PA
30425341003	**CO44-PZM048**	EPA 8260B	LEL	9	PASI-PA
30425341004	**CO45-PZM047**	EPA 8260B	LEL	9	PASI-PA
30425341005	**CO46-PZM047**	EPA 8260B	LEL	9	PASI-PA
30425341006	**CO47-PZM046**	EPA 8260B	LEL	9	PASI-PA
30425341007	**CO48-PZM044**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425341

Sample: Trip Blank **Lab ID: 30425341001** Collected: 06/10/21 00:01 Received: 06/10/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		06/17/21 15:12	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		06/17/21 15:12	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		06/17/21 15:12	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		06/17/21 15:12	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		06/17/21 15:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		1		06/17/21 15:12	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%.	70-130		1		06/17/21 15:12	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		1		06/17/21 15:12	2037-26-5	
Dibromofluoromethane (S)	112	%.	70-130		1		06/17/21 15:12	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425341

Sample: CO43-PZM048 **Lab ID: 30425341002** Collected: 06/10/21 12:15 Received: 06/10/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1330**	ug/L	50.0	16.9	50		06/18/21 11:01	71-43-2	
Ethylbenzene	**5.0**	ug/L	1.0	0.40	1		06/17/21 16:28	100-41-4	
Naphthalene	**32.7**	ug/L	2.0	0.82	1		06/17/21 16:28	91-20-3	
Toluene	**3.5**	ug/L	1.0	0.32	1		06/17/21 16:28	108-88-3	
Xylene (Total)	**30.9**	ug/L	3.0	1.4	1		06/17/21 16:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		1		06/17/21 16:28	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		1		06/17/21 16:28	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		1		06/17/21 16:28	2037-26-5	
Dibromofluoromethane (S)	92	%.	70-130		1		06/17/21 16:28	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425341

Sample: CO44-PZM048 **Lab ID: 30425341003** Collected: 06/10/21 12:40 Received: 06/10/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**4490**	ug/L	50.0	16.9	50		06/17/21 18:36	71-43-2	
Ethylbenzene	**17.0**	ug/L	1.0	0.40	1		06/17/21 18:10	100-41-4	
Naphthalene	**197**	ug/L	2.0	0.82	1		06/17/21 18:10	91-20-3	
Toluene	**85.0**	ug/L	1.0	0.32	1		06/17/21 18:10	108-88-3	
Xylene (Total)	**141**	ug/L	3.0	1.4	1		06/17/21 18:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%.	70-130		1		06/17/21 18:10	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		1		06/17/21 18:10	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		1		06/17/21 18:10	2037-26-5	
Dibromofluoromethane (S)	91	%.	70-130		1		06/17/21 18:10	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425341

Sample: CO45-PZM047 **Lab ID: 30425341004** Collected: 06/10/21 13:20 Received: 06/10/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**541**	ug/L	10.0	3.4	10		06/18/21 10:36	71-43-2	
Ethylbenzene	**1.0**	ug/L	1.0	0.40	1		06/17/21 16:54	100-41-4	
Naphthalene	**12.9**	ug/L	2.0	0.82	1		06/17/21 16:54	91-20-3	
Toluene	**0.60J**	ug/L	1.0	0.32	1		06/17/21 16:54	108-88-3	
Xylene (Total)	**2.1J**	ug/L	3.0	1.4	1		06/17/21 16:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	70-130		1		06/17/21 16:54	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		1		06/17/21 16:54	17060-07-0	
Toluene-d8 (S)	98	%.	70-130		1		06/17/21 16:54	2037-26-5	
Dibromofluoromethane (S)	102	%.	70-130		1		06/17/21 16:54	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425341

Sample: CO46-PZM047 **Lab ID: 30425341005** Collected: 06/10/21 13:50 Received: 06/10/21 22:30 Matrix: Water

Comments: • Sample ID on containers does not match COC.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**82600**	ug/L	500	169	500		06/18/21 10:48	71-43-2	
Ethylbenzene	**401**	ug/L	5.0	2.0	5		06/17/21 19:01	100-41-4	
Naphthalene	**636**	ug/L	10.0	4.1	5		06/17/21 19:01	91-20-3	
Toluene	**19500**	ug/L	200	63.4	200		06/17/21 19:27	108-88-3	
Xylene (Total)	**5410**	ug/L	600	270	200		06/17/21 19:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	70-130		5		06/17/21 19:01	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		5		06/17/21 19:01	17060-07-0	
Toluene-d8 (S)	102	%.	70-130		5		06/17/21 19:01	2037-26-5	
Dibromofluoromethane (S)	87	%.	70-130		5		06/17/21 19:01	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425341

Sample: CO47-PZM046 **Lab ID: 30425341006** Collected: 06/10/21 14:30 Received: 06/10/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**208000**	ug/L	1000	338	1000		06/18/21 11:14	71-43-2	
Ethylbenzene	**463**	ug/L	5.0	2.0	5		06/17/21 19:52	100-41-4	
Naphthalene	**561**	ug/L	10.0	4.1	5		06/17/21 19:52	91-20-3	
Toluene	**17900**	ug/L	200	63.4	200		06/17/21 20:17	108-88-3	
Xylene (Total)	**4260**	ug/L	15.0	6.8	5		06/17/21 19:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		5		06/17/21 19:52	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		5		06/17/21 19:52	17060-07-0	
Toluene-d8 (S)	103	%.	70-130		5		06/17/21 19:52	2037-26-5	
Dibromofluoromethane (S)	82	%.	70-130		5		06/17/21 19:52	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30425341

Sample: CO48-PZM044 **Lab ID: 30425341007** Collected: 06/10/21 15:00 Received: 06/10/21 22:30 Matrix: Water

Comments: • Collection time not listed on COC, time obtained from sample containers.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**21600**	ug/L	500	169	500		06/17/21 21:08	71-43-2	
Ethylbenzene	**261**	ug/L	5.0	2.0	5		06/17/21 20:42	100-41-4	
Naphthalene	**1250**	ug/L	10.0	4.1	5		06/17/21 20:42	91-20-3	
Toluene	**10200**	ug/L	500	158	500		06/17/21 21:08	108-88-3	
Xylene (Total)	**2260**	ug/L	15.0	6.8	5		06/17/21 20:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		5		06/17/21 20:42	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%.	70-130		5		06/17/21 20:42	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		5		06/17/21 20:42	2037-26-5	
Dibromofluoromethane (S)	87	%.	70-130		5		06/17/21 20:42	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30425341

QC Batch: 452911 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30425341001, 30425341002, 30425341003, 30425341004, 30425341005, 30425341006, 30425341007

METHOD BLANK: 2186445 Matrix: Water
Associated Lab Samples: 30425341001, 30425341002, 30425341003, 30425341004, 30425341005, 30425341006, 30425341007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	06/17/21 13:30	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	06/17/21 13:30	
Naphthalene	ug/L	2.0 U	2.0	0.82	06/17/21 13:30	
Toluene	ug/L	1.0 U	1.0	0.32	06/17/21 13:30	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	06/17/21 13:30	
1,2-Dichloroethane-d4 (S)	%.	107	70-130		06/17/21 13:30	
4-Bromofluorobenzene (S)	%.	99	70-130		06/17/21 13:30	
Dibromofluoromethane (S)	%.	106	70-130		06/17/21 13:30	
Toluene-d8 (S)	%.	98	70-130		06/17/21 13:30	

LABORATORY CONTROL SAMPLE: 2186446

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.8	104	70-130	
Ethylbenzene	ug/L	20	20.9	105	70-130	
Naphthalene	ug/L	20	20.1	101	55-160	
Toluene	ug/L	20	20.7	104	70-130	
Xylene (Total)	ug/L	60	62.2	104	70-130	
1,2-Dichloroethane-d4 (S)	%.			101	70-130	
4-Bromofluorobenzene (S)	%.			98	70-130	
Dibromofluoromethane (S)	%.			97	70-130	
Toluene-d8 (S)	%.			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2186447 2186448

Parameter	Units	30425306004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	18.5	18.4	93	92	50-149	1	30	
Ethylbenzene	ug/L	ND	20	20	17.6	18.6	88	93	63-135	6	30	
Naphthalene	ug/L	ND	20	20	16.3	14.8	81	74	30-157	10	30	
Toluene	ug/L	ND	20	20	17.5	18.7	88	94	59-139	7	30	
Xylene (Total)	ug/L	ND	60	60	53.3	55.7	89	93	63-135	5	30	
1,2-Dichloroethane-d4 (S)	%.						101	95	70-130			
4-Bromofluorobenzene (S)	%.						104	102	70-130			
Dibromofluoromethane (S)	%.						96	97	70-130			
Toluene-d8 (S)	%.						101	102	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30425341

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30425341

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30425341001	**Trip Blank**	EPA 8260B	452911		
30425341002	**CO43-PZM048**	EPA 8260B	452911		
30425341003	**CO44-PZM048**	EPA 8260B	452911		
30425341004	**CO45-PZM047**	EPA 8260B	452911		
30425341005	**CO46-PZM047**	EPA 8260B	452911		
30425341006	**CO47-PZM046**	EPA 8260B	452911		
30425341007	**CO48-PZM044**	EPA 8260B	452911		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request D

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

WO# : 30425341

30425341

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Requested Analysis Filtered (Y/N)

Valid Matrix Codes: DRINKING WATER (DW), WATER (WT), WASTE WATER (WW), PRODUCT (P), SOIL/SOLID (SL), OIL (OL), WIPE (WP), AIR (AR), OTHER (OT), TISSUE (TS)

ITEM #	Section D Required Client Information — 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	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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-		6/10/21		-		2				2						x		001
2	C043-PZM048	WT	G				1215		3				3						X		002
3	C044-PZM048	WT	G				1240		3				3						X		003
4	C045-PZM047	WT	G				1320		3				3						X		004
5	C046-PZM047	WT	G				1350		3				3						X		005
6	C047-PZM046	WT	G				1430		3				3						X		006
7	C048-PZM044	WT	G						3				3						X		007
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions
Data Package Required? (Y/N): No	ARm	6/10/21	1545	Pace	6/10/21	1545	
Data Validation Required? (Y/N): No	Pace	6/10/21	1912	TDS TAT	6-10-21	1925	Y
If data package is required, attach data package checklist	TDS TAT	6/10/21	2230	Marlon Ulam	6/10/21	2330	LCD N Y
							MC 6-11-2021

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: Lisa Perrin

DATE Signed (MM/DD/YY): 6/10/21

Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project # #30425341

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLC
LIMS Login ML

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.6 °C Correction Factor: 0 °C Final Temp: 1.6 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and initials of person examining contents: ML 6/11/2021
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	ML 6/11/2021 ✓	✓		5. Sample 005 reads C046-PZM046 on Sample label and reads C046-PZM047 on cx (All 3 VOA)	
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed ML	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: no time on cx for 007 Time on sample label reads 1500

☐ **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

July 07, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30428177

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on June 28, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30428177

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30428177

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30428177001	**Trip Blank**	Water	06/28/21 00:01	06/28/21 22:30
30428177002	**CO59-PZP002**	Water	06/28/21 13:30	06/28/21 22:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30428177

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30428177001	**Trip Blank**	EPA 8260B	LEL	9	PASI-PA
30428177002	**CO59-PZP002**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30428177

Sample: Trip Blank **Lab ID: 30428177001** Collected: 06/28/21 00:01 Received: 06/28/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		07/03/21 17:04	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		07/03/21 17:04	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		07/03/21 17:04	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		07/03/21 17:04	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		07/03/21 17:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		1		07/03/21 17:04	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%.	70-130		1		07/03/21 17:04	17060-07-0	
Toluene-d8 (S)	92	%.	70-130		1		07/03/21 17:04	2037-26-5	
Dibromofluoromethane (S)	123	%.	70-130		1		07/03/21 17:04	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30428177

Sample: CO59-PZP002 **Lab ID: 30428177002** Collected: 06/28/21 13:30 Received: 06/28/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		07/03/21 22:08	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		07/03/21 22:08	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		07/03/21 22:08	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		07/03/21 22:08	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		07/03/21 22:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%.	70-130		1		07/03/21 22:08	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%.	70-130		1		07/03/21 22:08	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		1		07/03/21 22:08	2037-26-5	
Dibromofluoromethane (S)	116	%.	70-130		1		07/03/21 22:08	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30428177

QC Batch: 455076
QC Batch Method: EPA 8260B
Analysis Method: EPA 8260B
Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30428177001, 30428177002

METHOD BLANK: 2197579 Matrix: Water
Associated Lab Samples: 30428177001, 30428177002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	07/03/21 14:31	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	07/03/21 14:31	
Naphthalene	ug/L	2.0 U	2.0	0.82	07/03/21 14:31	
Toluene	ug/L	1.0 U	1.0	0.32	07/03/21 14:31	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	07/03/21 14:31	
1,2-Dichloroethane-d4 (S)	%.	104	70-130		07/03/21 14:31	
4-Bromofluorobenzene (S)	%.	96	70-130		07/03/21 14:31	
Dibromofluoromethane (S)	%.	116	70-130		07/03/21 14:31	
Toluene-d8 (S)	%.	95	70-130		07/03/21 14:31	

LABORATORY CONTROL SAMPLE: 2197580

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	21.8	109	70-130	
Ethylbenzene	ug/L	20	22.3	112	70-130	
Naphthalene	ug/L	20	19.2	96	55-160	
Toluene	ug/L	20	21.4	107	70-130	
Xylene (Total)	ug/L	60	67.0	112	70-130	
1,2-Dichloroethane-d4 (S)	%.			89	70-130	
4-Bromofluorobenzene (S)	%.			96	70-130	
Dibromofluoromethane (S)	%.			98	70-130	
Toluene-d8 (S)	%.			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2197581 2197582

Parameter	Units	30429046001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	17.5	14.5	87	73	50-149	19	30	
Ethylbenzene	ug/L	ND	20	20	16.8	13.9	84	70	63-135	19	30	
Naphthalene	ug/L	ND	20	20	14.3	12.9	71	64	30-157	10	30	
Toluene	ug/L	ND	20	20	16.4	14.1	82	71	59-139	15	30	
Xylene (Total)	ug/L	ND	60	60	50.2	42.0	84	70	63-135	18	30	
1,2-Dichloroethane-d4 (S)	%.						94	90	70-130			
4-Bromofluorobenzene (S)	%.						94	95	70-130			
Dibromofluoromethane (S)	%.						99	100	70-130			
Toluene-d8 (S)	%.						98	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30428177

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30428177

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30428177001	**Trip Blank**	EPA 8260B	455076		
30428177002	**CO59-PZP002**	EPA 8260B	455076		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 30428177

30428177

Section A
Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	**5 day**

Section B
Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C
Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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	$Na_2S_2O_3$	Other	DI Water	Analysis Test Y/N: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-			6/25/21	-		2				2					x		001
2	C059-PZP002	Wt	G			6/25/21	1330		3				3					X		002
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No	JNW Bowman ARM	6/24/21	1530	[illegible] Pace	6/28/21	1720
Data Validation Required? (Y/N): No	[illegible] Pace	6/28/21	1720	QDS Pace	6/28/21	1755
If data package is required, attach data package checklist.	QDS Pace	6/28/21	2230	Marchini L (Lary)	6-28-2021	2230

Sample Conditions		
C/I		
Y	N	Y
Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joshua Bowman

SIGNATURE of SAMPLER: JNW Bowman **DATE Signed (MM/DD/YY):** 06/25/21

*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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project # #-30428177

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label mlc
LIMS Login mlc

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp .9 °C Correction Factor: 0 °C Final Temp: .9 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: mlc 6/24/2021
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.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓	✓		16. mlc 6-24-2021	
All containers meet method preservation requirements.	✓			Initial when completed mlc	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

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 19, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30409997

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on March 11, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
J.Price, ARM Group Inc.
Mr. Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30409997

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30409997

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30409997001	**Trip Blank Wt 1**	Water	03/11/21 00:01	03/11/21 21:50
30409997002	**CO60-PZP001**	Water	03/11/21 08:35	03/11/21 21:50
30409997003	**CO26-PZM007**	Water	03/11/21 09:50	03/11/21 21:50
30409997004	**CO58-PZM001**	Water	03/11/21 10:15	03/11/21 21:50
30409997005	**CO55-PZM000**	Water	03/11/21 10:45	03/11/21 21:50
30409997006	**CO30-PZM015**	Water	03/11/21 12:10	03/11/21 21:50
30409997007	**CO195-MWS**	Water	03/11/21 12:50	03/11/21 21:50
30409997008	**CO190-MWS**	Water	03/11/21 13:40	03/11/21 21:50
30409997009	**CO93-PZM**	Water	03/11/21 14:25	03/11/21 21:50

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30409997

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30409997001	**Trip Blank Wt 1**	EPA 8260B	AJC	9	PASI-PA
30409997002	**CO60-PZP001**	EPA 8260B	AJC	9	PASI-PA
30409997003	**CO26-PZM007**	EPA 8260B	AJC	9	PASI-PA
30409997004	**CO58-PZM001**	EPA 8260B	AJC	9	PASI-PA
30409997005	**CO55-PZM000**	EPA 8260B	AJC	9	PASI-PA
30409997006	**CO30-PZM015**	EPA 8260B	AJC	9	PASI-PA
30409997007	**CO195-MWS**	EPA 8260B	AJC	9	PASI-PA
30409997008	**CO190-MWS**	EPA 8260B	AJC	9	PASI-PA
30409997009	**CO93-PZM**	EPA 8260B	AJC	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409997

Sample: Trip Blank Wt 1 **Lab ID: 30409997001** Collected: 03/11/21 00:01 Received: 03/11/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		03/17/21 13:40	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		03/17/21 13:40	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		03/17/21 13:40	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		03/17/21 13:40	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		03/17/21 13:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	113	%.	70-130		1		03/17/21 13:40	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%.	70-130		1		03/17/21 13:40	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		1		03/17/21 13:40	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		03/17/21 13:40	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409997

Sample: CO60-PZP001 **Lab ID: 30409997002** Collected: 03/11/21 08:35 Received: 03/11/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**318**	ug/L	1.0	0.34	1		03/17/21 14:56	71-43-2	
Ethylbenzene	**11.0**	ug/L	1.0	0.40	1		03/17/21 14:56	100-41-4	
Naphthalene	**3990**	ug/L	100	41.0	50		03/17/21 15:21	91-20-3	
Toluene	**113**	ug/L	1.0	0.32	1		03/17/21 14:56	108-88-3	
Xylene (Total)	**269**	ug/L	3.0	1.4	1		03/17/21 14:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%.	70-130		1		03/17/21 14:56	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%.	70-130		1		03/17/21 14:56	17060-07-0	
Toluene-d8 (S)	102	%.	70-130		1		03/17/21 14:56	2037-26-5	
Dibromofluoromethane (S)	97	%.	70-130		1		03/17/21 14:56	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409997

Sample: CO26-PZM007 **Lab ID: 30409997003** Collected: 03/11/21 09:50 Received: 03/11/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**94.3**	ug/L	1.0	0.34	1		03/17/21 14:31	71-43-2	
Ethylbenzene	**3.5**	ug/L	1.0	0.40	1		03/17/21 14:31	100-41-4	
Naphthalene	**966**	ug/L	20.0	8.2	10		03/18/21 21:22	91-20-3	
Toluene	**43.9**	ug/L	1.0	0.32	1		03/17/21 14:31	108-88-3	
Xylene (Total)	**74.7**	ug/L	3.0	1.4	1		03/17/21 14:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	70-130		1		03/17/21 14:31	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		1		03/17/21 14:31	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		1		03/17/21 14:31	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		1		03/17/21 14:31	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409997

Sample: CO58-PZM001 **Lab ID: 30409997004** Collected: 03/11/21 10:15 Received: 03/11/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**81.2**	ug/L	1.0	0.34	1		03/17/21 15:47	71-43-2	
Ethylbenzene	**5.2**	ug/L	1.0	0.40	1		03/17/21 15:47	100-41-4	
Naphthalene	**905**	ug/L	100	41.0	50		03/17/21 16:12	91-20-3	
Toluene	**20.2**	ug/L	1.0	0.32	1		03/17/21 15:47	108-88-3	
Xylene (Total)	**74.8**	ug/L	3.0	1.4	1		03/17/21 15:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		1		03/17/21 15:47	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%.	70-130		1		03/17/21 15:47	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		1		03/17/21 15:47	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		03/17/21 15:47	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409997

Sample: CO55-PZM000 **Lab ID: 30409997005** Collected: 03/11/21 10:45 Received: 03/11/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		03/17/21 14:05	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		03/17/21 14:05	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		03/17/21 14:05	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		03/17/21 14:05	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		03/17/21 14:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	115	%.	70-130		1		03/17/21 14:05	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%.	70-130		1		03/17/21 14:05	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		1		03/17/21 14:05	2037-26-5	
Dibromofluoromethane (S)	103	%.	70-130		1		03/17/21 14:05	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409997

Sample: CO30-PZM015 **Lab ID: 30409997006** Collected: 03/11/21 12:10 Received: 03/11/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**98700**	ug/L	500	169	500		03/17/21 17:03	71-43-2	
Ethylbenzene	**105**	ug/L	5.0	2.0	5		03/17/21 16:38	100-41-4	
Naphthalene	**8420**	ug/L	1000	410	500		03/17/21 17:03	91-20-3	
Toluene	**7990**	ug/L	500	158	500		03/17/21 17:03	108-88-3	
Xylene (Total)	**1480**	ug/L	15.0	6.8	5		03/17/21 16:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	70-130		5		03/17/21 16:38	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		5		03/17/21 16:38	17060-07-0	
Toluene-d8 (S)	103	%.	70-130		5		03/17/21 16:38	2037-26-5	
Dibromofluoromethane (S)	87	%.	70-130		5		03/17/21 16:38	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409997

Sample: CO195-MWS **Lab ID: 30409997007** Collected: 03/11/21 12:50 Received: 03/11/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**67300**	ug/L	500	169	500		03/17/21 17:53	71-43-2	
Ethylbenzene	**69.6**	ug/L	5.0	2.0	5		03/17/21 17:28	100-41-4	
Naphthalene	**1650**	ug/L	10.0	4.1	5		03/17/21 17:28	91-20-3	
Toluene	**5540**	ug/L	500	158	500		03/17/21 17:53	108-88-3	
Xylene (Total)	**930**	ug/L	15.0	6.8	5		03/17/21 17:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		5		03/17/21 17:28	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%.	70-130		5		03/17/21 17:28	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		5		03/17/21 17:28	2037-26-5	
Dibromofluoromethane (S)	87	%.	70-130		5		03/17/21 17:28	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409997

Sample: CO190-MWS **Lab ID: 30409997008** Collected: 03/11/21 13:40 Received: 03/11/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**155000**	ug/L	500	169	500		03/17/21 18:44	71-43-2	
Ethylbenzene	**9.5**	ug/L	5.0	2.0	5		03/17/21 18:19	100-41-4	
Naphthalene	**97.0**	ug/L	10.0	4.1	5		03/17/21 18:19	91-20-3	
Toluene	**8510**	ug/L	500	158	500		03/17/21 18:44	108-88-3	
Xylene (Total)	**194**	ug/L	15.0	6.8	5		03/17/21 18:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		5		03/17/21 18:19	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%.	70-130		5		03/17/21 18:19	17060-07-0	
Toluene-d8 (S)	102	%.	70-130		5		03/17/21 18:19	2037-26-5	
Dibromofluoromethane (S)	83	%.	70-130		5		03/17/21 18:19	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30409997

Sample: CO93-PZM **Lab ID: 30409997009** Collected: 03/11/21 14:25 Received: 03/11/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**249000**	ug/L	1000	338	1000		03/17/21 19:34	71-43-2	
Ethylbenzene	**641**	ug/L	5.0	2.0	5		03/17/21 19:09	100-41-4	
Naphthalene	**1340**	ug/L	10.0	4.1	5		03/17/21 19:09	91-20-3	
Toluene	**73900**	ug/L	1000	317	1000		03/17/21 19:34	108-88-3	
Xylene (Total)	**15000**	ug/L	3000	1350	1000		03/17/21 19:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%.	70-130		5		03/17/21 19:09	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%.	70-130		5		03/17/21 19:09	17060-07-0	
Toluene-d8 (S)	100	%.	70-130		5		03/17/21 19:09	2037-26-5	
Dibromofluoromethane (S)	82	%.	70-130		5		03/17/21 19:09	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30409997

QC Batch: 439104 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30409997001, 30409997002, 30409997003, 30409997004, 30409997005, 30409997006, 30409997007, 30409997008, 30409997009

METHOD BLANK: 2119890 Matrix: Water
Associated Lab Samples: 30409997001, 30409997002, 30409997003, 30409997004, 30409997005, 30409997006, 30409997007, 30409997008, 30409997009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	03/17/21 13:14	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	03/17/21 13:14	
Naphthalene	ug/L	2.0 U	2.0	0.82	03/17/21 13:14	
Toluene	ug/L	1.0 U	1.0	0.32	03/17/21 13:14	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	03/17/21 13:14	
1,2-Dichloroethane-d4 (S)	%.	106	70-130		03/17/21 13:14	
4-Bromofluorobenzene (S)	%.	120	70-130		03/17/21 13:14	
Dibromofluoromethane (S)	%.	102	70-130		03/17/21 13:14	
Toluene-d8 (S)	%.	100	70-130		03/17/21 13:14	

LABORATORY CONTROL SAMPLE: 2119891

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.6	98	70-130	
Ethylbenzene	ug/L	20	19.8	99	70-130	
Naphthalene	ug/L	20	20.6	103	55-160	
Toluene	ug/L	20	19.9	99	70-130	
Xylene (Total)	ug/L	60	57.1	95	70-130	
1,2-Dichloroethane-d4 (S)	%.			105	70-130	
4-Bromofluorobenzene (S)	%.			104	70-130	
Dibromofluoromethane (S)	%.			102	70-130	
Toluene-d8 (S)	%.			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2119892 2119893

Parameter	Units	30409997005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	1.0 U	20	20	20.0	17.7	100	89	50-149	12	30	
Ethylbenzene	ug/L	1.0 U	20	20	19.4	18.2	97	91	63-135	6	30	
Naphthalene	ug/L	2.0 U	20	20	21.3	20.4	107	102	30-157	4	30	
Toluene	ug/L	1.0 U	20	20	20.0	18.4	100	92	59-139	8	30	
Xylene (Total)	ug/L	3.0 U	60	60	56.0	52.1	93	87	63-135	7	30	
1,2-Dichloroethane-d4 (S)	%.						104	103	70-130			
4-Bromofluorobenzene (S)	%.						104	104	70-130			
Dibromofluoromethane (S)	%.						104	103	70-130			
Toluene-d8 (S)	%.						102	102	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30409997

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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: 30409997004

[1] Residual Chlorine was present in the VOA vial used for analysis.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30409997

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30409997001	**Trip Blank Wt 1**	EPA 8260B	439104		
30409997002	**CO60-PZP001**	EPA 8260B	439104		
30409997003	**CO26-PZM007**	EPA 8260B	439104		
30409997004	**CO58-PZM001**	EPA 8260B	439104		
30409997005	**CO55-PZM000**	EPA 8260B	439104		
30409997006	**CO30-PZM015**	EPA 8260B	439104		
30409997007	**CO195-MWS**	EPA 8260B	439104		
30409997008	**CO190-MWS**	EPA 8260B	439104		
30409997009	**CO93-PZM**	EPA 8260B	439104		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request D

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

WO# : 30409997

30409997

Section A Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	20010210
Project Name:	COA
Project Number:	20010210

Section C Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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

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	$Na_2S_2O_3$	Other	DI Water	Analysis Test Y/N: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-			3/11/21	-		2				2					X		001
2	C060-PZP001	WT	G				835		3				3					X		002
3	C026-PZM007	WT	G				950		3				3					X		003
4	C058-PZM001	WT	G				1015		3				3					X		004
5	C055-PZM000	WT	G				1045		3				3					X		005
6	C030-PZM015	WT	G				1210		3				3					X		006
7	C095-MW5	WT	G				1250		3				3					X		007
8	C090-MW5	WT	G				1340		3				3					X		008
9	C093-PZM	WT	G				1425		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): No		3/11/21	1530	Pace	3/11/21	1530			
Data Validation Required? (Y/N): No	Pace	3/11/21	1850	RDS Pace	3-11-21	1855	Y		
If data package is required, attach data package checklist.	RDS Pace	3-11-21	2150		3-11-21	2150	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 3/11/21

Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

"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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project # #-30409997

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MC
LIMS Login MC

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.2 °C Correction Factor: 0 °C Final Temp: 1.2 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MC 3/11/2021
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.		✓		Initial when completed	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

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 15, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30439447

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on September 07, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

This project follows the April 5, 2016 revision 3 Quality Assurance Project Plan for Sparrows Point Terminal Site, Sparrows Point, MD prepared for EnviroAnalytics Group and is not for PA DEP compliance reporting.

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Leandra Glumac, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc. in partnership with EMA LLC
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30439447

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30439447

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30439447001	**Trip Blank Wt 1**	Water	09/07/21 00:00	09/07/21 22:30
30439447002	**C093-PZM**	Water	09/07/21 10:15	09/07/21 22:30
30439447003	**C0190-MWS**	Water	09/07/21 11:15	09/07/21 22:30
30439447004	**C024-PZM007**	Water	09/07/21 12:05	09/07/21 22:30
30439447005	**C023-PZM008**	Water	09/07/21 14:10	09/07/21 22:30
30439447006	**C059-PZP002**	Water	09/07/21 15:35	09/07/21 22:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30439447

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30439447001	**Trip Blank Wt 1**	EPA 8260B	JAS	9	PASI-PA
30439447002	**C093-PZM**	EPA 8260B	JAS	9	PASI-PA
30439447003	**C0190-MWS**	EPA 8260B	JAS	9	PASI-PA
30439447004	**C024-PZM007**	EPA 8260B	JAS	9	PASI-PA
30439447005	**C023-PZM008**	EPA 8260B	JAS	9	PASI-PA
30439447006	**C059-PZP002**	EPA 8260B	JAS	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: COA
Pace Project No.: 30439447

Method: **EPA 8260B**
Description: 8260B MSV
Client: Tradepoint Atlantic
Date: September 15, 2021

General Information:
6 samples were analyzed for EPA 8260B by Pace Analytical Services Greensburg. 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.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439447

Sample: Trip Blank Wt 1 **Lab ID: 30439447001** Collected: 09/07/21 00:00 Received: 09/07/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		09/13/21 11:04	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/13/21 11:04	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		09/13/21 11:04	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		09/13/21 11:04	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/13/21 11:04	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%.	70-130		1		09/13/21 11:04	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	70-130		1		09/13/21 11:04	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%.	70-130		1		09/13/21 11:04	17060-07-0	
Dibromofluoromethane (S)	106	%.	70-130		1		09/13/21 11:04	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439447

Sample: C093-PZM **Lab ID: 30439447002** Collected: 09/07/21 10:15 Received: 09/07/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**159000**	ug/L	2000	676	2000		09/14/21 09:29	71-43-2	
Ethylbenzene	**1290**	ug/L	5.0	2.0	5		09/13/21 16:00	100-41-4	
Naphthalene	**6040**	ug/L	200	81.9	100		09/13/21 16:25	91-20-3	
Toluene	**57300**	ug/L	2000	634	2000		09/14/21 09:29	108-88-3	
Xylene (Total)	**16800**	ug/L	300	135	100		09/13/21 16:25	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%.	70-130		5		09/13/21 16:00	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	70-130		5		09/13/21 16:00	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		5		09/13/21 16:00	17060-07-0	
Dibromofluoromethane (S)	94	%.	70-130		5		09/13/21 16:00	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439447

Sample: C0190-MWS **Lab ID: 30439447003** Collected: 09/07/21 11:15 Received: 09/07/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**763000**	ug/L	2000	676	2000		09/13/21 17:39	71-43-2	
Ethylbenzene	**68.6**	ug/L	5.0	2.0	5		09/13/21 16:50	100-41-4	
Naphthalene	**315**	ug/L	10.0	4.1	5		09/13/21 16:50	91-20-3	
Toluene	**54400**	ug/L	500	158	500		09/13/21 17:14	108-88-3	
Xylene (Total)	**1540**	ug/L	15.0	6.8	5		09/13/21 16:50	1330-20-7	
Surrogates									
Toluene-d8 (S)	106	%.	70-130		5		09/13/21 16:50	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	70-130		5		09/13/21 16:50	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%.	70-130		5		09/13/21 16:50	17060-07-0	
Dibromofluoromethane (S)	90	%.	70-130		5		09/13/21 16:50	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439447

Sample: C024-PZM007 **Lab ID: 30439447004** Collected: 09/07/21 12:05 Received: 09/07/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**2.3**	ug/L	1.0	0.34	1		09/13/21 14:22	71-43-2	
Ethylbenzene	**3.6**	ug/L	1.0	0.40	1		09/13/21 14:22	100-41-4	
Naphthalene	**6510**	ug/L	100	41.0	50		09/13/21 14:46	91-20-3	
Toluene	**1.4**	ug/L	1.0	0.32	1		09/13/21 14:22	108-88-3	
Xylene (Total)	**4.3**	ug/L	3.0	1.4	1		09/13/21 14:22	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%.	70-130		1		09/13/21 14:22	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	70-130		1		09/13/21 14:22	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%.	70-130		1		09/13/21 14:22	17060-07-0	
Dibromofluoromethane (S)	106	%.	70-130		1		09/13/21 14:22	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439447

Sample: C023-PZM008 **Lab ID: 30439447005** Collected: 09/07/21 14:10 Received: 09/07/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**377**	ug/L	5.0	1.7	5		09/13/21 15:11	71-43-2	
Ethylbenzene	**23.3**	ug/L	5.0	2.0	5		09/13/21 15:11	100-41-4	
Naphthalene	**4450**	ug/L	100	41.0	50		09/13/21 15:36	91-20-3	
Toluene	**217**	ug/L	5.0	1.6	5		09/13/21 15:11	108-88-3	
Xylene (Total)	**374**	ug/L	15.0	6.8	5		09/13/21 15:11	1330-20-7	
Surrogates									
Toluene-d8 (S)	96	%.	70-130		5		09/13/21 15:11	2037-26-5	
4-Bromofluorobenzene (S)	92	%.	70-130		5		09/13/21 15:11	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%.	70-130		5		09/13/21 15:11	17060-07-0	
Dibromofluoromethane (S)	108	%.	70-130		5		09/13/21 15:11	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439447

Sample: C059-PZP002 **Lab ID: 30439447006** Collected: 09/07/21 15:35 Received: 09/07/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**2.2**	ug/L	1.0	0.34	1		09/13/21 13:57	71-43-2	
Ethylbenzene	**0.48J**	ug/L	1.0	0.40	1		09/13/21 13:57	100-41-4	
Naphthalene	**2.8**	ug/L	2.0	0.82	1		09/13/21 13:57	91-20-3	
Toluene	**2.2**	ug/L	1.0	0.32	1		09/13/21 13:57	108-88-3	
Xylene (Total)	**4.1**	ug/L	3.0	1.4	1		09/13/21 13:57	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%.	70-130		1		09/13/21 13:57	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	70-130		1		09/13/21 13:57	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%.	70-130		1		09/13/21 13:57	17060-07-0	
Dibromofluoromethane (S)	101	%.	70-130		1		09/13/21 13:57	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30439447

QC Batch: 463774 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30439447001, 30439447002, 30439447003, 30439447004, 30439447005, 30439447006

METHOD BLANK: 2239200 Matrix: Water
Associated Lab Samples: 30439447001, 30439447002, 30439447003, 30439447004, 30439447005, 30439447006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	09/13/21 10:15	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	09/13/21 10:15	
Naphthalene	ug/L	2.0 U	2.0	0.82	09/13/21 10:15	
Toluene	ug/L	1.0 U	1.0	0.32	09/13/21 10:15	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	09/13/21 10:15	
1,2-Dichloroethane-d4 (S)	%.	107	70-130		09/13/21 10:15	
4-Bromofluorobenzene (S)	%.	97	70-130		09/13/21 10:15	
Dibromofluoromethane (S)	%.	100	70-130		09/13/21 10:15	
Toluene-d8 (S)	%.	96	70-130		09/13/21 10:15	

LABORATORY CONTROL SAMPLE: 2239201

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.9	99	70-130	
Ethylbenzene	ug/L	20	22.8	114	70-130	
Naphthalene	ug/L	20	19.8	99	55-160	
Toluene	ug/L	20	21.8	109	70-130	
Xylene (Total)	ug/L	60	66.2	110	70-130	
1,2-Dichloroethane-d4 (S)	%.			109	70-130	
4-Bromofluorobenzene (S)	%.			102	70-130	
Dibromofluoromethane (S)	%.			105	70-130	
Toluene-d8 (S)	%.			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2239481 2239482

Parameter	Units	30438561005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	21.1	21.5	105	108	50-149	2	30	
Ethylbenzene	ug/L	ND	20	20	23.6	22.8	118	114	63-135	4	30	
Naphthalene	ug/L	ND	20	20	20.2	19.5	101	98	30-157	4	30	
Toluene	ug/L	ND	20	20	21.9	22.0	110	110	59-139	0	30	
Xylene (Total)	ug/L	ND	60	60	68.8	67.2	115	112	63-135	2	30	
1,2-Dichloroethane-d4 (S)	%.						96	108	70-130			
4-Bromofluorobenzene (S)	%.						102	101	70-130			
Dibromofluoromethane (S)	%.						103	105	70-130			
Toluene-d8 (S)	%.						102	101	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30439447

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30439447

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30439447001	**Trip Blank Wt 1**	EPA 8260B	463774		
30439447002	**C093-PZM**	EPA 8260B	463774		
30439447003	**C0190-MWS**	EPA 8260B	463774		
30439447004	**C024-PZM007**	EPA 8260B	463774		
30439447005	**C023-PZM008**	EPA 8260B	463774		
30439447006	**C059-PZP002**	EPA 8260B	463774		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CHAIN-OF-CUSTODY / Analytical Request Document

Pace Analytical
www.pacelabs.com

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:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B — Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C — Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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	$Na_2S_2O_3$	Other	DI Water	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	WT	-			9/7/21	←		2				2					X		01
2	C093-PZM	WT	G				1015		3				3					X		02
3	C090-MW5	WT	G				1115		3				3					X		03
4	C024-PZM007	WT	G				1205		3				3					X		004
5	C023-PZM008	WT	G				1410		3				3					X		005
6	C059-PZP002	WT	G				1535		3				3					X		006
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions		
Data Package Required? (Y/N): No		9/7/21	1100		9/7/21	1600			
	Pace	9/7/21	1840	RDS FACE	9-7-21	1850		Y	
	FACE	9-7-21	2230						
				Brunell	9-7-21	2230	4.2	Y	N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 9/7/21

Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

WO#: 30439447

30439447

Page 15 of 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

Pace Analytical®

Pace Greensburg Lab -Sample Container Count

Client: Tradepoint

Site: Caa

Profile Number: 13367

Notes:

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	
1	WT																					2							
2																						3							
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unprserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosul
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass Na Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserve
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved		

Plastic / Misc.

GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250ml plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag

WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe

30439447

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label# MR

LIMS Login MF

Tracking #: ~

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 4.3 °C Correction Factor: ~0.1 °C Final Temp: 4.2 °C

Temp should be above freezing to 6°C

30439447

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MR 9-8-21
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 sample field filtered			~	13.	
Organic Samples checked for dechlorination:			~	14.	
Filtered volume received for Dissolved tests			~	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		~		16.	
All containers meet method preservation requirements.	~			Initial when completed MR	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		~		17.	
Trip Blank Present:	~			18.	
Trip Blank Custody Seals Present	~				
Rad Samples Screened < 0.5 mrem/hr			~	Initial when completed: MR	Date: 9-8-21 Survey Meter SN:

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 16, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30439642

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on September 08, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Leandra Glumac, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc. in partnership with EMA LLC
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30439642

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30439642

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30439642001	**Trip Blank Wt 1**	Water	09/08/21 00:01	09/08/21 22:50
30439642002	**CO56-PZP001**	Water	09/08/21 08:55	09/08/21 22:50
30439642003	**CO55-PZM000**	Water	09/08/21 10:00	09/08/21 22:50
30439642004	**CO26-PZM007**	Water	09/08/21 11:00	09/08/21 22:50
30439642005	**CO57-PZP002**	Water	09/08/21 11:45	09/08/21 22:50
30439642006	**CO58-PZM001**	Water	09/08/21 13:05	09/08/21 22:50
30439642007	**CO60-PZM001**	Water	09/08/21 14:00	09/08/21 22:50
30439642008	**CO40-PZM008**	Water	09/08/21 15:30	09/08/21 22:50

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30439642

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30439642001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30439642002	**CO56-PZP001**	EPA 8260B	LEL	9	PASI-PA
30439642003	**CO55-PZM000**	EPA 8260B	LEL	9	PASI-PA
30439642004	**CO26-PZM007**	EPA 8260B	LEL	9	PASI-PA
30439642005	**CO57-PZP002**	EPA 8260B	LEL	9	PASI-PA
30439642006	**CO58-PZM001**	EPA 8260B	LEL	9	PASI-PA
30439642007	**CO60-PZM001**	EPA 8260B	LEL	9	PASI-PA
30439642008	**CO40-PZM008**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439642

Sample: Trip Blank Wt 1 **Lab ID: 30439642001** Collected: 09/08/21 00:01 Received: 09/08/21 22:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		09/14/21 13:21	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/14/21 13:21	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		09/14/21 13:21	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		09/14/21 13:21	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/14/21 13:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		09/14/21 13:21	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		1		09/14/21 13:21	17060-07-0	
Toluene-d8 (S)	98	%.	70-130		1		09/14/21 13:21	2037-26-5	
Dibromofluoromethane (S)	117	%.	70-130		1		09/14/21 13:21	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439642

Sample: CO56-PZP001 **Lab ID: 30439642002** Collected: 09/08/21 08:55 Received: 09/08/21 22:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**244**	ug/L	5.0	1.7	5		09/14/21 16:44	71-43-2	
Ethylbenzene	**7.5**	ug/L	5.0	2.0	5		09/14/21 16:44	100-41-4	
Naphthalene	**2080**	ug/L	10.0	4.1	5		09/14/21 16:44	91-20-3	E
Toluene	**73.1**	ug/L	5.0	1.6	5		09/14/21 16:44	108-88-3	
Xylene (Total)	**150**	ug/L	15.0	6.8	5		09/14/21 16:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	120	%.	70-130		5		09/14/21 16:44	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		5		09/14/21 16:44	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		09/14/21 16:44	2037-26-5	
Dibromofluoromethane (S)	113	%.	70-130		5		09/14/21 16:44	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439642

Sample: CO55-PZM000 **Lab ID: 30439642003** Collected: 09/08/21 10:00 Received: 09/08/21 22:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**0.63J**	ug/L	1.0	0.34	1		09/14/21 15:54	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/14/21 15:54	100-41-4	
Naphthalene	**2.8**	ug/L	2.0	0.82	1		09/14/21 15:54	91-20-3	
Toluene	**0.47J**	ug/L	1.0	0.32	1		09/14/21 15:54	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/14/21 15:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		09/14/21 15:54	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%.	70-130		1		09/14/21 15:54	17060-07-0	
Toluene-d8 (S)	93	%.	70-130		1		09/14/21 15:54	2037-26-5	
Dibromofluoromethane (S)	123	%.	70-130		1		09/14/21 15:54	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439642

Sample: CO26-PZM007 **Lab ID: 30439642004** Collected: 09/08/21 11:00 Received: 09/08/21 22:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**165**	ug/L	1.0	0.34	1		09/14/21 17:10	71-43-2	
Ethylbenzene	**6.0**	ug/L	1.0	0.40	1		09/14/21 17:10	100-41-4	
Naphthalene	**1840**	ug/L	20.0	8.2	10		09/14/21 17:35	91-20-3	
Toluene	**87.0**	ug/L	1.0	0.32	1		09/14/21 17:10	108-88-3	
Xylene (Total)	**153**	ug/L	3.0	1.4	1		09/14/21 17:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	70-130		1		09/14/21 17:10	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%.	70-130		1		09/14/21 17:10	17060-07-0	
Toluene-d8 (S)	102	%.	70-130		1		09/14/21 17:10	2037-26-5	
Dibromofluoromethane (S)	105	%.	70-130		1		09/14/21 17:10	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439642

Sample: CO57-PZP002 **Lab ID: 30439642005** Collected: 09/08/21 11:45 Received: 09/08/21 22:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		09/14/21 16:19	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/14/21 16:19	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		09/14/21 16:19	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		09/14/21 16:19	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/14/21 16:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		1		09/14/21 16:19	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%.	70-130		1		09/14/21 16:19	17060-07-0	
Toluene-d8 (S)	93	%.	70-130		1		09/14/21 16:19	2037-26-5	
Dibromofluoromethane (S)	125	%.	70-130		1		09/14/21 16:19	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439642

Sample: CO58-PZM001 **Lab ID: 30439642006** Collected: 09/08/21 13:05 Received: 09/08/21 22:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**57.5**	ug/L	1.0	0.34	1		09/14/21 18:51	71-43-2	
Ethylbenzene	**3.2**	ug/L	1.0	0.40	1		09/14/21 18:51	100-41-4	
Naphthalene	**662**	ug/L	100	41.0	50		09/14/21 19:16	91-20-3	
Toluene	**10.4**	ug/L	1.0	0.32	1		09/14/21 18:51	108-88-3	
Xylene (Total)	**41.6**	ug/L	3.0	1.4	1		09/14/21 18:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	114	%.	70-130		1		09/14/21 18:51	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%.	70-130		1		09/14/21 18:51	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		1		09/14/21 18:51	2037-26-5	
Dibromofluoromethane (S)	108	%.	70-130		1		09/14/21 18:51	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439642

Sample: CO60-PZM001 **Lab ID: 30439642007** Collected: 09/08/21 14:00 Received: 09/08/21 22:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**201**	ug/L	1.0	0.34	1		09/14/21 18:00	71-43-2	
Ethylbenzene	**6.5**	ug/L	1.0	0.40	1		09/14/21 18:00	100-41-4	
Naphthalene	**1650**	ug/L	40.0	16.4	20		09/14/21 18:26	91-20-3	
Toluene	**19.2**	ug/L	1.0	0.32	1		09/14/21 18:00	108-88-3	
Xylene (Total)	**164**	ug/L	3.0	1.4	1		09/14/21 18:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		1		09/14/21 18:00	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%.	70-130		1		09/14/21 18:00	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		1		09/14/21 18:00	2037-26-5	
Dibromofluoromethane (S)	104	%.	70-130		1		09/14/21 18:00	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439642

Sample: CO40-PZM008 **Lab ID: 30439642008** Collected: 09/08/21 15:30 Received: 09/08/21 22:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**664**	ug/L	50.0	16.9	50		09/14/21 20:06	71-43-2	
Ethylbenzene	**3.5**	ug/L	1.0	0.40	1		09/14/21 19:41	100-41-4	
Naphthalene	**336**	ug/L	2.0	0.82	1		09/14/21 19:41	91-20-3	
Toluene	**75.7**	ug/L	1.0	0.32	1		09/14/21 19:41	108-88-3	
Xylene (Total)	**25.1**	ug/L	3.0	1.4	1		09/14/21 19:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	114	%.	70-130		1		09/14/21 19:41	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%.	70-130		1		09/14/21 19:41	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		1		09/14/21 19:41	2037-26-5	
Dibromofluoromethane (S)	95	%.	70-130		1		09/14/21 19:41	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30439642

QC Batch: 464008 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30439642001, 30439642002, 30439642003, 30439642004, 30439642005, 30439642006, 30439642007, 30439642008

METHOD BLANK: 2240199 Matrix: Water
Associated Lab Samples: 30439642001, 30439642002, 30439642003, 30439642004, 30439642005, 30439642006, 30439642007, 30439642008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	09/14/21 12:31	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	09/14/21 12:31	
Naphthalene	ug/L	2.0 U	2.0	0.82	09/14/21 12:31	
Toluene	ug/L	1.0 U	1.0	0.32	09/14/21 12:31	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	09/14/21 12:31	
1,2-Dichloroethane-d4 (S)	%.	98	70-130		09/14/21 12:31	
4-Bromofluorobenzene (S)	%.	103	70-130		09/14/21 12:31	
Dibromofluoromethane (S)	%.	114	70-130		09/14/21 12:31	
Toluene-d8 (S)	%.	96	70-130		09/14/21 12:31	

LABORATORY CONTROL SAMPLE: 2240200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	17.9	90	70-130	
Ethylbenzene	ug/L	20	19.0	95	70-130	
Naphthalene	ug/L	20	15.0	75	55-160	
Toluene	ug/L	20	19.3	96	70-130	
Xylene (Total)	ug/L	60	57.0	95	70-130	
1,2-Dichloroethane-d4 (S)	%.			88	70-130	
4-Bromofluorobenzene (S)	%.			99	70-130	
Dibromofluoromethane (S)	%.			96	70-130	
Toluene-d8 (S)	%.			103	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2240201 2240202

Parameter	Units	30439641001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	1.0 U	20	20	15.0	16.6	75	83	50-149	10	30	
Ethylbenzene	ug/L	1.0 U	20	20	14.9	16.8	74	84	63-135	12	30	
Naphthalene	ug/L	2.0 U	20	20	11.4	12.9	57	64	30-157	12	30	
Toluene	ug/L	1.0 U	20	20	15.3	16.8	76	84	59-139	10	30	
Xylene (Total)	ug/L	3.0 U	60	60	43.8	50.3	73	84	63-135	14	30	
1,2-Dichloroethane-d4 (S)	%.						84	83	70-130			
4-Bromofluorobenzene (S)	%.						100	100	70-130			
Dibromofluoromethane (S)	%.						97	96	70-130			
Toluene-d8 (S)	%.						101	99	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30439642

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30439642

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30439642001	**Trip Blank Wt 1**	EPA 8260B	464008		
30439642002	**CO56-PZP001**	EPA 8260B	464008		
30439642003	**CO55-PZM000**	EPA 8260B	464008		
30439642004	**CO26-PZM007**	EPA 8260B	464008		
30439642005	**CO57-PZP002**	EPA 8260B	464008		
30439642006	**CO58-PZM001**	EPA 8260B	464008		
30439642007	**CO60-PZM001**	EPA 8260B	464008		
30439642008	**CO40-PZM008**	EPA 8260B	464008		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Reques

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

WO# : 30439642

30439642

Section A Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	2[illegible]010210

Section C Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Pace Quote Reference:	
Pace Project Manager:	Samantha Bayura
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MD

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE (DRINKING WATER, WATER, WASTE WATER, PRODUCT, SOIL/SOLID, OIL, WIPE, AIR, OTHER, TISSUE)	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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	WT	G			9/8/21	—		2				2						X		001
2	C056-PZP001	WT	WT	G				855		3				3						X		002
3	C055-PZM000	WT	WT	G				1000		3				3						X		003
4	C026-PZM007	WT	WT	G				1100		3				3						X		004
5	C057-PZP002	WT	WT	G				1145		3				3						X		005
6	C058-PZM001	WT	WT	G				1305		3				3						X		006
7	C060-PZM001	WT	WT	G				1400		3				3						X		007
8	C040-PZM008	WT	WT	G				1530		3				3						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): No		9/8/21	1600		9/8/21	1600			
Data Validation Required? (Y/N): No		9/8/21	1920		9821	1935			
If data package is required, attach data package sheet(s)		9-8-21	2250		9/8/2021	2250	Y	N	Y
							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): 9/8/21

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.

Pittsburgh Lab Sample Condition Upon Receipt

30439642

Pace Analytical

Client Name: Tradepoint Atlantic Project #

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

Label: mlc
LIMS Login: mlc

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used: 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp: 1.3 °C Correction Factor: +.1 °C Final Temp: 1.4 °C

Temp should be above freezing to 6°C

pH paper Lot#: N/A

Date and Initials of person examining contents: 9/9/20 EJ

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 sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.
All containers meet method preservation requirements.	✓			Initial when completed: mlc Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

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, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30439902

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Leandra Glumac, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30439902

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30439902

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30439902001	**Trip Blank Wt 1**	Water	09/09/21 00:01	09/09/21 23:00
30439902002	**CO39-PZM007**	Water	09/09/21 09:00	09/09/21 23:00
30439902003	**CO39-PZM042**	Water	09/09/21 12:40	09/09/21 23:00
30439902004	**CO36-PZM008**	Water	09/09/21 14:10	09/09/21 23:00
30439902005	**CO36-PZM043**	Water	09/09/21 15:40	09/09/21 23:00

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30439902

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30439902001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30439902002	**CO39-PZM007**	EPA 8260B	LEL	9	PASI-PA
30439902003	**CO39-PZM042**	EPA 8260B	LEL	9	PASI-PA
30439902004	**CO36-PZM008**	EPA 8260B	LEL	9	PASI-PA
30439902005	**CO36-PZM043**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439902

Sample: Trip Blank Wt 1 **Lab ID: 30439902001** Collected: 09/09/21 00:01 Received: 09/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		09/20/21 13:11	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/20/21 13:11	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		09/20/21 13:11	91-20-3	L1
Toluene	**1.0 U**	ug/L	1.0	0.32	1		09/20/21 13:11	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/20/21 13:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	108	%.	70-130		1		09/20/21 13:11	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%.	70-130		1		09/20/21 13:11	17060-07-0	
Toluene-d8 (S)	93	%.	70-130		1		09/20/21 13:11	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		09/20/21 13:11	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439902

Sample: CO39-PZM007 **Lab ID: 30439902002** Collected: 09/09/21 09:00 Received: 09/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**7320**	ug/L	50.0	16.9	50		09/20/21 17:01	71-43-2	
Ethylbenzene	**21.8**	ug/L	5.0	2.0	5		09/20/21 16:35	100-41-4	
Naphthalene	**1020**	ug/L	10.0	4.1	5		09/20/21 16:35	91-20-3	L1
Toluene	**1080**	ug/L	5.0	1.6	5		09/20/21 16:35	108-88-3	
Xylene (Total)	**195**	ug/L	15.0	6.8	5		09/20/21 16:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%.	70-130		5		09/20/21 16:35	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%.	70-130		5		09/20/21 16:35	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		09/20/21 16:35	2037-26-5	
Dibromofluoromethane (S)	93	%.	70-130		5		09/20/21 16:35	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439902

Sample: CO39-PZM042 **Lab ID: 30439902003** Collected: 09/09/21 12:40 Received: 09/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**8640**	ug/L	50.0	16.9	50		09/20/21 17:52	71-43-2	
Ethylbenzene	**59.0**	ug/L	5.0	2.0	5		09/20/21 17:26	100-41-4	
Naphthalene	**1590**	ug/L	10.0	4.1	5		09/20/21 17:26	91-20-3	L1
Toluene	**1920**	ug/L	5.0	1.6	5		09/20/21 17:26	108-88-3	
Xylene (Total)	**503**	ug/L	15.0	6.8	5		09/20/21 17:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		5		09/20/21 17:26	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%.	70-130		5		09/20/21 17:26	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		09/20/21 17:26	2037-26-5	
Dibromofluoromethane (S)	90	%.	70-130		5		09/20/21 17:26	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439902

Sample: CO36-PZM008 **Lab ID: 30439902004** Collected: 09/09/21 14:10 Received: 09/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**17700**	ug/L	500	169	500		09/20/21 20:24	71-43-2	
Ethylbenzene	**61.0**	ug/L	5.0	2.0	5		09/20/21 19:59	100-41-4	
Naphthalene	**769**	ug/L	10.0	4.1	5		09/20/21 19:59	91-20-3	L1
Toluene	**4160**	ug/L	500	158	500		09/20/21 20:24	108-88-3	
Xylene (Total)	**988**	ug/L	15.0	6.8	5		09/20/21 19:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	70-130		5		09/20/21 19:59	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%.	70-130		5		09/20/21 19:59	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		5		09/20/21 19:59	2037-26-5	
Dibromofluoromethane (S)	86	%.	70-130		5		09/20/21 19:59	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30439902

Sample: CO36-PZM043 **Lab ID: 30439902005** Collected: 09/09/21 15:40 Received: 09/09/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**22800**	ug/L	200	67.6	200		09/20/21 19:34	71-43-2	
Ethylbenzene	**42.9**	ug/L	5.0	2.0	5		09/20/21 19:08	100-41-4	
Naphthalene	**835**	ug/L	10.0	4.1	5		09/20/21 19:08	91-20-3	L1
Toluene	**3160**	ug/L	200	63.4	200		09/20/21 19:34	108-88-3	
Xylene (Total)	**711**	ug/L	15.0	6.8	5		09/20/21 19:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%.	70-130		5		09/20/21 19:08	460-00-4	
1,2-Dichloroethane-d4 (S)	89	%.	70-130		5		09/20/21 19:08	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		5		09/20/21 19:08	2037-26-5	
Dibromofluoromethane (S)	85	%.	70-130		5		09/20/21 19:08	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30439902

QC Batch: 464697 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30439902001, 30439902002, 30439902003, 30439902004, 30439902005

METHOD BLANK: 2243905 Matrix: Water
Associated Lab Samples: 30439902001, 30439902002, 30439902003, 30439902004, 30439902005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	09/20/21 11:04	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	09/20/21 11:04	
Naphthalene	ug/L	2.0 U	2.0	0.82	09/20/21 11:04	
Toluene	ug/L	1.0 U	1.0	0.32	09/20/21 11:04	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	09/20/21 11:04	
1,2-Dichloroethane-d4 (S)	%.	99	70-130		09/20/21 11:04	
4-Bromofluorobenzene (S)	%.	104	70-130		09/20/21 11:04	
Dibromofluoromethane (S)	%.	102	70-130		09/20/21 11:04	
Toluene-d8 (S)	%.	94	70-130		09/20/21 11:04	

LABORATORY CONTROL SAMPLE: 2243906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	23.3	117	70-130	
Ethylbenzene	ug/L	20	23.2	116	70-130	
Naphthalene	ug/L	20	33.4	167	55-160	L1
Toluene	ug/L	20	23.0	115	70-130	
Xylene (Total)	ug/L	60	69.1	115	70-130	
1,2-Dichloroethane-d4 (S)	%.			98	70-130	
4-Bromofluorobenzene (S)	%.			107	70-130	
Dibromofluoromethane (S)	%.			102	70-130	
Toluene-d8 (S)	%.			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2243907 2243908

Parameter	Units	30439620033 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	18.1	18.1	90	90	50-149	0	30	
Ethylbenzene	ug/L	ND	20	20	17.3	17.2	86	86	63-135	0	30	
Naphthalene	ug/L	ND	20	20	24.9	25.3	119	121	30-157	2	30	
Toluene	ug/L	ND	20	20	17.5	17.4	87	87	59-139	0	30	
Xylene (Total)	ug/L	ND	60	60	50.9	50.7	85	84	63-135	0	30	
1,2-Dichloroethane-d4 (S)	%.						97	98	70-130			
4-Bromofluorobenzene (S)	%.						106	108	70-130			
Dibromofluoromethane (S)	%.						98	100	70-130			
Toluene-d8 (S)	%.						98	96	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30439902

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30439902

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30439902001	**Trip Blank Wt 1**	EPA 8260B	464697		
30439902002	**CO39-PZM007**	EPA 8260B	464697		
30439902003	**CO39-PZM042**	EPA 8260B	464697		
30439902004	**CO36-PZM008**	EPA 8260B	464697		
30439902005	**CO36-PZM043**	EPA 8260B	464697		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Dc

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

WO# : 30439902

30439902

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location **STATE:** MD

Requested Analysis Filtered (Y/N)

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

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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	—			9/9/21	—		2				2						X		
2	C039-PZM007	WT	G				900		3				3						X		
3	C039-PZM042	WT	G				1240		3				3						X		
4	C036-PZM008	WT	G				1410		3				3						X		
5	C036-PZM043	WT	G				1540		3				3						X		
6																					
7																					
8																					
9																					
10																					
11																					
12																					

001
002
003
004

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions		
Data Package Required? (Y/N): No	[signature]	9/9/21	1605	[signature] / Pace	9/9/21	1605			
Data Validation Required? (Y/N): No	[signature] / Pace	9/9/21	1920	CRDS Pace	9921	1930		✓	
If data package is required, attach data package checklist.	CRDS Pace	9921	2300	Maura Lilam	9/9/21	2300	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perm

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 9/9/21

Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project # # 30439902

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label ML
LIMS Login ML

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.4 °C Correction Factor: +.1 °C Final Temp: 1.5 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and initials of person examining contents: ML 9/10/2021
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed ML	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

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, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30440303

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Leandra Glumac, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30440303

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30440303

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30440303001	**Trip Blank Wt 1**	Water	09/13/21 00:01	09/13/21 22:15
30440303002	**C037-PZM038**	Water	09/13/21 15:05	09/13/21 22:15

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30440303

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30440303001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30440303002	**C037-PZM038**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440303

Sample: Trip Blank Wt 1 **Lab ID: 30440303001** Collected: 09/13/21 00:01 Received: 09/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		09/20/21 13:36	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/20/21 13:36	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		09/20/21 13:36	91-20-3	L1
Toluene	**1.0 U**	ug/L	1.0	0.32	1		09/20/21 13:36	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/20/21 13:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		1		09/20/21 13:36	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%.	70-130		1		09/20/21 13:36	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		1		09/20/21 13:36	2037-26-5	
Dibromofluoromethane (S)	104	%.	70-130		1		09/20/21 13:36	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440303

Sample: C037-PZM038 **Lab ID: 30440303002** Collected: 09/13/21 15:05 Received: 09/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**16000**	ug/L	100	33.8	100		09/20/21 18:43	71-43-2	
Ethylbenzene	**281**	ug/L	1.0	0.40	1		09/20/21 18:17	100-41-4	
Naphthalene	**15600**	ug/L	200	81.9	100		09/20/21 18:43	91-20-3	L1
Toluene	**8350**	ug/L	100	31.7	100		09/20/21 18:43	108-88-3	
Xylene (Total)	**2420**	ug/L	300	135	100		09/20/21 18:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	70-130		1		09/20/21 18:17	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%.	70-130		1		09/20/21 18:17	17060-07-0	
Toluene-d8 (S)	93	%.	70-130		1		09/20/21 18:17	2037-26-5	
Dibromofluoromethane (S)	85	%.	70-130		1		09/20/21 18:17	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30440303

QC Batch: 464697
QC Batch Method: EPA 8260B
Analysis Method: EPA 8260B
Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30440303001, 30440303002

METHOD BLANK: 2243905 Matrix: Water
Associated Lab Samples: 30440303001, 30440303002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	09/20/21 11:04	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	09/20/21 11:04	
Naphthalene	ug/L	2.0 U	2.0	0.82	09/20/21 11:04	
Toluene	ug/L	1.0 U	1.0	0.32	09/20/21 11:04	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	09/20/21 11:04	
1,2-Dichloroethane-d4 (S)	%.	99	70-130		09/20/21 11:04	
4-Bromofluorobenzene (S)	%.	104	70-130		09/20/21 11:04	
Dibromofluoromethane (S)	%.	102	70-130		09/20/21 11:04	
Toluene-d8 (S)	%.	94	70-130		09/20/21 11:04	

LABORATORY CONTROL SAMPLE: 2243906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	23.3	117	70-130	
Ethylbenzene	ug/L	20	23.2	116	70-130	
Naphthalene	ug/L	20	33.4	167	55-160	L1
Toluene	ug/L	20	23.0	115	70-130	
Xylene (Total)	ug/L	60	69.1	115	70-130	
1,2-Dichloroethane-d4 (S)	%.			98	70-130	
4-Bromofluorobenzene (S)	%.			107	70-130	
Dibromofluoromethane (S)	%.			102	70-130	
Toluene-d8 (S)	%.			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2243907 2243908

Parameter	Units	30439620033 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	18.1	18.1	90	90	50-149	0	30	
Ethylbenzene	ug/L	ND	20	20	17.3	17.2	86	86	63-135	0	30	
Naphthalene	ug/L	ND	20	20	24.9	25.3	119	121	30-157	2	30	
Toluene	ug/L	ND	20	20	17.5	17.4	87	87	59-139	0	30	
Xylene (Total)	ug/L	ND	60	60	50.9	50.7	85	84	63-135	0	30	
1,2-Dichloroethane-d4 (S)	%.						97	98	70-130			
4-Bromofluorobenzene (S)	%.						106	108	70-130			
Dibromofluoromethane (S)	%.						98	100	70-130			
Toluene-d8 (S)	%.						98	96	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30440303

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30440303

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30440303001	**Trip Blank Wt 1**	EPA 8260B	464697		
30440303002	**C037-PZM038**	EPA 8260B	464697		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 30440303

30440303

Section A — Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B — Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C — Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	WT	-			9/13/21	—		2				2					X			001
2	C037-PZM038	WT	G			1	1505		3				3					X			002
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions: Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Data Package Required? (Y/N): No		9/13/21	1556		9/13/21	1556			
Data Validation Required? (Y/N): No	Pace	9/13/21	1820		9-13-21	1855		4	
If data package is required, attach data package checklist		9/13/21	2215		9-13-21	2215	3.2	N	4

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perra

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 9/13/21

Page 10 of 11

F-ALL-Q-020rev.06, 2-Feb-2007

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Project #

WO#: 30440303
Due Date: 09/21/21
PM: SMB
CLIENT: TRADEPOINT

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

Label RM
LIMS Login RM

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.3 °C Correction Factor: -.1 °C Final Temp: 3.2 °C

Temp should be above freezing to 6°C

pH paper Lot# N/A

Date and Initials of person examining contents: RM 9-14-21

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 sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix			✓	16.
All containers meet method preservation requirements.	✓			Initial when completed RM Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

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, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30440510

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on September 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Leandra Glumac, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30440510

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30440510

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30440510001	**Trip Blank Wt 1**	Water	09/14/21 00:01	09/14/21 22:30
30440510002	**CO38-PZM006**	Water	09/14/21 08:50	09/14/21 22:30
30440510003	**CO38-PZM043**	Water	09/14/21 10:00	09/14/21 22:30
30440510004	**CO27-PZM012**	Water	09/14/21 10:45	09/14/21 22:30
30440510005	**CO27-PZM046**	Water	09/14/21 12:05	09/14/21 22:30
30440510006	**CO42-PZM004**	Water	09/14/21 13:30	09/14/21 22:30
30440510007	**CO41-PZM001**	Water	09/14/21 14:15	09/14/21 22:30
30440510008	**CO41-PZM036**	Water	09/14/21 15:20	09/14/21 22:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30440510

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30440510001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30440510002	**CO38-PZM006**	EPA 8260B	LEL	9	PASI-PA
30440510003	**CO38-PZM043**	EPA 8260B	LEL	9	PASI-PA
30440510004	**CO27-PZM012**	EPA 8260B	LEL	9	PASI-PA
30440510005	**CO27-PZM046**	EPA 8260B	LEL	9	PASI-PA
30440510006	**CO42-PZM004**	EPA 8260B	LEL	9	PASI-PA
30440510007	**CO41-PZM001**	EPA 8260B	LEL	9	PASI-PA
30440510008	**CO41-PZM036**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440510

Sample: Trip Blank Wt 1 **Lab ID: 30440510001** Collected: 09/14/21 00:01 Received: 09/14/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		09/20/21 13:49	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/20/21 13:49	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		09/20/21 13:49	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		09/20/21 13:49	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/20/21 13:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		1		09/20/21 13:49	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		1		09/20/21 13:49	17060-07-0	
Toluene-d8 (S)	93	%.	70-130		1		09/20/21 13:49	2037-26-5	
Dibromofluoromethane (S)	103	%.	70-130		1		09/20/21 13:49	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440510

Sample: CO38-PZM006 **Lab ID: 30440510002** Collected: 09/14/21 08:50 Received: 09/14/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**4500**	ug/L	50.0	16.9	50		09/20/21 18:56	71-43-2	
Ethylbenzene	**59.3**	ug/L	5.0	2.0	5		09/20/21 18:30	100-41-4	
Naphthalene	**1620**	ug/L	10.0	4.1	5		09/20/21 18:30	91-20-3	
Toluene	**871**	ug/L	5.0	1.6	5		09/20/21 18:30	108-88-3	
Xylene (Total)	**446**	ug/L	15.0	6.8	5		09/20/21 18:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	70-130		5		09/20/21 18:30	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%.	70-130		5		09/20/21 18:30	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		5		09/20/21 18:30	2037-26-5	
Dibromofluoromethane (S)	95	%.	70-130		5		09/20/21 18:30	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440510

Sample: CO38-PZM043 **Lab ID: 30440510003** Collected: 09/14/21 10:00 Received: 09/14/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**0.76J**	ug/L	1.0	0.34	1		09/20/21 15:06	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/20/21 15:06	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		09/20/21 15:06	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		09/20/21 15:06	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/20/21 15:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%.	70-130		1		09/20/21 15:06	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		1		09/20/21 15:06	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		1		09/20/21 15:06	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		09/20/21 15:06	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440510

Sample: CO27-PZM012 **Lab ID: 30440510004** Collected: 09/14/21 10:45 Received: 09/14/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**8490**	ug/L	500	169	500		09/20/21 19:46	71-43-2	
Ethylbenzene	**101**	ug/L	5.0	2.0	5		09/20/21 19:21	100-41-4	
Naphthalene	**793**	ug/L	10.0	4.1	5		09/20/21 19:21	91-20-3	
Toluene	**2750**	ug/L	500	158	500		09/20/21 19:46	108-88-3	
Xylene (Total)	**843**	ug/L	15.0	6.8	5		09/20/21 19:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		5		09/20/21 19:21	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%.	70-130		5		09/20/21 19:21	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		09/20/21 19:21	2037-26-5	
Dibromofluoromethane (S)	95	%.	70-130		5		09/20/21 19:21	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440510

Sample: CO27-PZM046 **Lab ID: 30440510005** Collected: 09/14/21 12:05 Received: 09/14/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**8620**	ug/L	100	33.8	100		09/20/21 18:04	71-43-2	
Ethylbenzene	**107**	ug/L	1.0	0.40	1		09/20/21 17:39	100-41-4	
Naphthalene	**3680**	ug/L	200	81.9	100		09/20/21 18:04	91-20-3	
Toluene	**2650**	ug/L	100	31.7	100		09/20/21 18:04	108-88-3	
Xylene (Total)	**1060**	ug/L	3.0	1.4	1		09/20/21 17:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%.	70-130		1		09/20/21 17:39	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%.	70-130		1		09/20/21 17:39	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		1		09/20/21 17:39	2037-26-5	
Dibromofluoromethane (S)	95	%.	70-130		1		09/20/21 17:39	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440510

Sample: CO42-PZM004 **Lab ID: 30440510006** Collected: 09/14/21 13:30 Received: 09/14/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**59.4**	ug/L	1.0	0.34	1		09/20/21 15:31	71-43-2	
Ethylbenzene	**14.7**	ug/L	1.0	0.40	1		09/20/21 15:31	100-41-4	
Naphthalene	**66.7**	ug/L	2.0	0.82	1		09/20/21 15:31	91-20-3	
Toluene	**48.7**	ug/L	1.0	0.32	1		09/20/21 15:31	108-88-3	
Xylene (Total)	**84.9**	ug/L	3.0	1.4	1		09/20/21 15:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	70-130		1		09/20/21 15:31	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		1		09/20/21 15:31	17060-07-0	
Toluene-d8 (S)	92	%.	70-130		1		09/20/21 15:31	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		09/20/21 15:31	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440510

Sample: CO41-PZM001 **Lab ID: 30440510007** Collected: 09/14/21 14:15 Received: 09/14/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**124**	ug/L	1.0	0.34	1		09/20/21 16:48	71-43-2	
Ethylbenzene	**3.6**	ug/L	1.0	0.40	1		09/20/21 16:48	100-41-4	
Naphthalene	**3.4**	ug/L	2.0	0.82	1		09/20/21 16:48	91-20-3	
Toluene	**44.5**	ug/L	1.0	0.32	1		09/20/21 16:48	108-88-3	
Xylene (Total)	**25.2**	ug/L	3.0	1.4	1		09/20/21 16:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		1		09/20/21 16:48	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		1		09/20/21 16:48	17060-07-0	
Toluene-d8 (S)	93	%.	70-130		1		09/20/21 16:48	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		1		09/20/21 16:48	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440510

Sample: CO41-PZM036 **Lab ID: 30440510008** Collected: 09/14/21 15:20 Received: 09/14/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**272000**	ug/L	1000	338	1000		09/20/21 20:37	71-43-2	
Ethylbenzene	**774**	ug/L	5.0	2.0	5		09/20/21 20:12	100-41-4	
Naphthalene	**418**	ug/L	10.0	4.1	5		09/20/21 20:12	91-20-3	
Toluene	**90700**	ug/L	1000	317	1000		09/20/21 20:37	108-88-3	
Xylene (Total)	**16700**	ug/L	3000	1350	1000		09/20/21 20:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		5		09/20/21 20:12	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%.	70-130		5		09/20/21 20:12	17060-07-0	
Toluene-d8 (S)	78	%.	70-130		5		09/20/21 20:12	2037-26-5	
Dibromofluoromethane (S)	93	%.	70-130		5		09/20/21 20:12	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30440510

QC Batch: 464702 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30440510001, 30440510002, 30440510003, 30440510004, 30440510005, 30440510006, 30440510007, 30440510008

METHOD BLANK: 2243937 Matrix: Water
Associated Lab Samples: 30440510001, 30440510002, 30440510003, 30440510004, 30440510005, 30440510006, 30440510007, 30440510008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	09/20/21 11:16	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	09/20/21 11:16	
Naphthalene	ug/L	2.0 U	2.0	0.82	09/20/21 11:16	
Toluene	ug/L	1.0 U	1.0	0.32	09/20/21 11:16	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	09/20/21 11:16	
1,2-Dichloroethane-d4 (S)	%.	100	70-130		09/20/21 11:16	
4-Bromofluorobenzene (S)	%.	99	70-130		09/20/21 11:16	
Dibromofluoromethane (S)	%.	103	70-130		09/20/21 11:16	
Toluene-d8 (S)	%.	94	70-130		09/20/21 11:16	

LABORATORY CONTROL SAMPLE: 2243938

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	17.9	90	70-130	
Ethylbenzene	ug/L	20	18.8	94	70-130	
Naphthalene	ug/L	20	24.1	121	55-160	
Toluene	ug/L	20	18.4	92	70-130	
Xylene (Total)	ug/L	60	58.0	97	70-130	
1,2-Dichloroethane-d4 (S)	%.			100	70-130	
4-Bromofluorobenzene (S)	%.			96	70-130	
Dibromofluoromethane (S)	%.			99	70-130	
Toluene-d8 (S)	%.			95	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2243939 2243940

Parameter	Units	30440034004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	17.3	15.9	87	79	50-149	9	30	
Ethylbenzene	ug/L	ND	20	20	16.0	15.4	80	77	63-135	4	30	
Naphthalene	ug/L	ND	20	20	18.2	19.1	89	93	30-157	5	30	
Toluene	ug/L	ND	20	20	16.4	15.3	82	76	59-139	7	30	
Xylene (Total)	ug/L	ND	60	60	49.5	47.3	82	79	63-135	4	30	
1,2-Dichloroethane-d4 (S)	%.						97	96	70-130			
4-Bromofluorobenzene (S)	%.						97	97	70-130			
Dibromofluoromethane (S)	%.						96	98	70-130			
Toluene-d8 (S)	%.						95	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30440510

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30440510

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30440510001	**Trip Blank Wt 1**	EPA 8260B	464702		
30440510002	**CO38-PZM006**	EPA 8260B	464702		
30440510003	**CO38-PZM043**	EPA 8260B	464702		
30440510004	**CO27-PZM012**	EPA 8260B	464702		
30440510005	**CO27-PZM046**	EPA 8260B	464702		
30440510006	**CO42-PZM004**	EPA 8260B	464702		
30440510007	**CO41-PZM001**	EPA 8260B	464702		
30440510008	**CO41-PZM036**	EPA 8260B	464702		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 30440510

30440510

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MD

Requested Analysis Filtered (Y/N)

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

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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	WT	—			9/14/21	—		2				2						X		001
2	C038-PZM006	WT	G				850		3				3						X		002
3	C038-PZM043	WT	G				1000		3				3						X		003
4	C027-PZM012	WT	G				1045		3				3						X		004
5	C027-PZM046	WT	G				1205		3				3						X		005
6	C042-PZM004	WT	G				1330		3				3						X		006
7	C041-PZM001	WT	G				1415		3				3						X		007
8	C041-PZM036	WT	G				1520		3				3						X		008
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions: Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Data Package Required? (Y/N): No		9/14/21	1553		9/14/21	1553			
Data Validation Required? (Y/N): No		9/14/21	1900	RDS PACE	9-14-21	1915	X	~~X~~	
If data package is required, attach data package agreement	KDS PACE	9-14-21	2230		9-14-21	2230	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perry

SIGNATURE of SAMPLER: Lisa Perry

DATE Signed (MM/DD/YY): 9/14/21

Pace Analytical Services, LLC reserves the right to charge interest on invoices not paid within 30 days.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project # 30440510

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 2.1 °C Correction Factor: +.1 °C Final Temp: 2.2 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MLL 9/14/2021
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed MLL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

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 23, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30440804

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on September 15, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Leandra Glumac, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30440804

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30440804

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30440804001	**Trip Blank Wt 1**	Water	09/15/21 00:01	09/15/21 22:45
30440804002	**CO182-MWI**	Water	09/15/21 08:30	09/15/21 22:45
30440804003	**CO194-MWS**	Water	09/15/21 10:10	09/15/21 22:45
30440804004	**CO195-MWS**	Water	09/15/21 11:35	09/15/21 22:45
30440804005	**CO196-MWS**	Water	09/15/21 13:00	09/15/21 22:45
30440804006	**CO201-MWS**	Water	09/15/21 13:50	09/15/21 22:45
30440804007	**CO198-MWS**	Water	09/15/21 15:00	09/15/21 22:45

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30440804

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30440804001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30440804002	**CO182-MWI**	EPA 8260B	LEL	9	PASI-PA
30440804003	**CO194-MWS**	EPA 8260B	LEL	9	PASI-PA
30440804004	**CO195-MWS**	EPA 8260B	LEL	9	PASI-PA
30440804005	**CO196-MWS**	EPA 8260B	LEL	9	PASI-PA
30440804006	**CO201-MWS**	EPA 8260B	LEL	9	PASI-PA
30440804007	**CO198-MWS**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440804

Sample: Trip Blank Wt 1 **Lab ID: 30440804001** Collected: 09/15/21 00:01 Received: 09/15/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		09/22/21 12:32	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/22/21 12:32	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		09/22/21 12:32	91-20-3	CH
Toluene	**1.0 U**	ug/L	1.0	0.32	1		09/22/21 12:32	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/22/21 12:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		1		09/22/21 12:32	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%.	70-130		1		09/22/21 12:32	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		1		09/22/21 12:32	2037-26-5	
Dibromofluoromethane (S)	106	%.	70-130		1		09/22/21 12:32	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440804

Sample: CO182-MWI **Lab ID: 30440804002** Collected: 09/15/21 08:30 Received: 09/15/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**317000**	ug/L	1000	338	1000		09/22/21 20:13	71-43-2	
Ethylbenzene	**911**	ug/L	5.0	2.0	5		09/22/21 19:48	100-41-4	
Naphthalene	**320**	ug/L	10.0	4.1	5		09/22/21 19:48	91-20-3	CH
Toluene	**44000**	ug/L	1000	317	1000		09/22/21 20:13	108-88-3	
Xylene (Total)	**12100**	ug/L	3000	1350	1000		09/22/21 20:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	113	%.	70-130		5		09/22/21 19:48	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		5		09/22/21 19:48	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		09/22/21 19:48	2037-26-5	
Dibromofluoromethane (S)	95	%.	70-130		5		09/22/21 19:48	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440804

Sample: CO194-MWS **Lab ID: 30440804003** Collected: 09/15/21 10:10 Received: 09/15/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**823**	ug/L	5.0	1.7	5		09/22/21 16:23	71-43-2	
Ethylbenzene	**5.2**	ug/L	5.0	2.0	5		09/22/21 16:23	100-41-4	
Naphthalene	**7540**	ug/L	200	81.9	100		09/22/21 16:49	91-20-3	CH
Toluene	**119**	ug/L	5.0	1.6	5		09/22/21 16:23	108-88-3	
Xylene (Total)	**65.9**	ug/L	15.0	6.8	5		09/22/21 16:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	108	%.	70-130		5		09/22/21 16:23	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		5		09/22/21 16:23	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		5		09/22/21 16:23	2037-26-5	
Dibromofluoromethane (S)	105	%.	70-130		5		09/22/21 16:23	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440804

Sample: CO195-MWS **Lab ID: 30440804004** Collected: 09/15/21 11:35 Received: 09/15/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**53900**	ug/L	500	169	500		09/23/21 11:00	71-43-2	
Ethylbenzene	**76.2**	ug/L	5.0	2.0	5		09/22/21 14:40	100-41-4	
Naphthalene	**3940**	ug/L	100	41.0	50		09/22/21 15:06	91-20-3	CH
Toluene	**3350**	ug/L	50.0	15.8	50		09/22/21 15:06	108-88-3	
Xylene (Total)	**980**	ug/L	15.0	6.8	5		09/22/21 14:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		5		09/22/21 14:40	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%.	70-130		5		09/22/21 14:40	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		5		09/22/21 14:40	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		5		09/22/21 14:40	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440804

Sample: CO196-MWS **Lab ID: 30440804005** Collected: 09/15/21 13:00 Received: 09/15/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**13200**	ug/L	100	33.8	100		09/22/21 17:40	71-43-2	
Ethylbenzene	**20.9**	ug/L	5.0	2.0	5		09/22/21 17:14	100-41-4	
Naphthalene	**1190**	ug/L	10.0	4.1	5		09/22/21 17:14	91-20-3	CH
Toluene	**836**	ug/L	5.0	1.6	5		09/22/21 17:14	108-88-3	
Xylene (Total)	**239**	ug/L	15.0	6.8	5		09/22/21 17:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	111	%.	70-130		5		09/22/21 17:14	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		5		09/22/21 17:14	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		09/22/21 17:14	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		5		09/22/21 17:14	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440804

Sample: CO201-MWS **Lab ID: 30440804006** Collected: 09/15/21 13:50 Received: 09/15/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**3880**	ug/L	10.0	3.4	10		09/22/21 14:14	71-43-2	
Ethylbenzene	**6.5**	ug/L	1.0	0.40	1		09/22/21 13:49	100-41-4	
Naphthalene	**692**	ug/L	20.0	8.2	10		09/22/21 14:14	91-20-3	CH
Toluene	**272**	ug/L	1.0	0.32	1		09/22/21 13:49	108-88-3	
Xylene (Total)	**106**	ug/L	3.0	1.4	1		09/22/21 13:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		1		09/22/21 13:49	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		1		09/22/21 13:49	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		1		09/22/21 13:49	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		1		09/22/21 13:49	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30440804

Sample: CO198-MWS **Lab ID: 30440804007** Collected: 09/15/21 15:00 Received: 09/15/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**636**	ug/L	5.0	1.7	5		09/22/21 18:06	71-43-2	
Ethylbenzene	**4.7J**	ug/L	5.0	2.0	5		09/22/21 18:06	100-41-4	
Naphthalene	**17000**	ug/L	200	81.9	100		09/22/21 18:31	91-20-3	CH
Toluene	**111**	ug/L	5.0	1.6	5		09/22/21 18:06	108-88-3	
Xylene (Total)	**60.3**	ug/L	15.0	6.8	5		09/22/21 18:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	112	%.	70-130		5		09/22/21 18:06	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		5		09/22/21 18:06	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		5		09/22/21 18:06	2037-26-5	
Dibromofluoromethane (S)	105	%.	70-130		5		09/22/21 18:06	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30440804

QC Batch: 465086 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30440804001, 30440804002, 30440804003, 30440804004, 30440804005, 30440804006, 30440804007

METHOD BLANK: 2245833 Matrix: Water
Associated Lab Samples: 30440804001, 30440804002, 30440804003, 30440804004, 30440804005, 30440804006, 30440804007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	09/22/21 12:06	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	09/22/21 12:06	
Naphthalene	ug/L	2.0 U	2.0	0.82	09/22/21 12:06	CH
Toluene	ug/L	1.0 U	1.0	0.32	09/22/21 12:06	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	09/22/21 12:06	
1,2-Dichloroethane-d4 (S)	%.	103	70-130		09/22/21 12:06	
4-Bromofluorobenzene (S)	%.	108	70-130		09/22/21 12:06	
Dibromofluoromethane (S)	%.	106	70-130		09/22/21 12:06	
Toluene-d8 (S)	%.	96	70-130		09/22/21 12:06	

LABORATORY CONTROL SAMPLE: 2245834

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.9	99	70-130	
Ethylbenzene	ug/L	20	19.9	100	70-130	
Naphthalene	ug/L	20	31.7	158	55-160	CH
Toluene	ug/L	20	19.9	99	70-130	
Xylene (Total)	ug/L	60	58.6	98	70-130	
1,2-Dichloroethane-d4 (S)	%.			104	70-130	
4-Bromofluorobenzene (S)	%.			105	70-130	
Dibromofluoromethane (S)	%.			106	70-130	
Toluene-d8 (S)	%.			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2245835 2245836

Parameter	Units	30441056004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	10.3	20	20	30.5	31.5	101	106	50-149	3	30	
Ethylbenzene	ug/L	1.0 U	20	20	16.4	18.3	82	91	63-135	11	30	
Naphthalene	ug/L	2.0 U	20	20	24.8	26.8	123	133	30-157	8	30	CH
Toluene	ug/L	1.0 U	20	20	17.3	18.4	87	92	59-139	6	30	
Xylene (Total)	ug/L	3.0 U	60	60	49.1	54.2	82	90	63-135	10	30	
1,2-Dichloroethane-d4 (S)	%.						106	104	70-130			
4-Bromofluorobenzene (S)	%.						108	107	70-130			
Dibromofluoromethane (S)	%.						104	104	70-130			
Toluene-d8 (S)	%.						98	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30440804

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30440804

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30440804001	**Trip Blank Wt 1**	EPA 8260B	465086		
30440804002	**CO182-MWI**	EPA 8260B	465086		
30440804003	**CO194-MWS**	EPA 8260B	465086		
30440804004	**CO195-MWS**	EPA 8260B	465086		
30440804005	**CO196-MWS**	EPA 8260B	465086		
30440804006	**CO201-MWS**	EPA 8260B	465086		
30440804007	**CO198-MWS**	EPA 8260B	465086		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 30440804

30440804

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Requested Analysis Filtered (Y/N)

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

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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	WT	—			9/15/21	—		2				2						X		001
2	C0182-mwI	WT	G				830		3				3						X		002
3	C0194-mwS	WT	G				1010		3				3						X		003
4	C0195-mwS	WT	G				1135		3				3						X		004
5	C0196-mwS	WT	G				1300		3				3						X		005
6	C0201-mwS	WT	G				1350		3				3						X		006
7	C0198-mwS	WT	G				1500		3				3						X		007
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions		
Data Package Required? (Y/N): No		9/15/21	1605		9/15/21	1605			
Data Validation Required? (Y/N): No		9/15/21	1915	RDS/Pace	9-15-21	1930	Y		
If data package is required, attach data package checklist	RDS/Pace	9-15-21	2245	Marlon L Clary	9/15/21	2245	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perry

SIGNATURE of SAMPLER: Lisa Perry

DATE Signed (MM/DD/YY): 09/15/21

Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

Pittsburgh Lab Sample Condition Upon Receipt

30440804

Pace Analytical

Client Name: Trackpoint Atlantic Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MC
LIMS Login MC

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.1 °C Correction Factor: -1 °C Final Temp: 3.0 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MC 9/16/2021
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: NT	✓			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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed MC	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

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 23, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30441056

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Leandra Glumac, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30441056

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30441056

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30441056001	**Trip Blank Wt 1**	Water	09/16/21 00:01	09/16/21 22:15
30441056002	**CO30-PZM015**	Water	09/16/21 08:45	09/16/21 22:15
30441056003	**GD02-MWI**	Water	09/16/21 10:35	09/16/21 22:15
30441056004	**GD01-MWI**	Water	09/16/21 15:10	09/16/21 22:15

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30441056

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30441056001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30441056002	**CO30-PZM015**	EPA 8260B	LEL	9	PASI-PA
30441056003	**GD02-MWI**	EPA 8260B	LEL	9	PASI-PA
30441056004	**GD01-MWI**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30441056

Sample: Trip Blank Wt 1 **Lab ID: 30441056001** Collected: 09/16/21 00:01 Received: 09/16/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		09/22/21 12:58	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/22/21 12:58	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		09/22/21 12:58	91-20-3	CH
Toluene	**1.0 U**	ug/L	1.0	0.32	1		09/22/21 12:58	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/22/21 12:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		1		09/22/21 12:58	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%.	70-130		1		09/22/21 12:58	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		1		09/22/21 12:58	2037-26-5	
Dibromofluoromethane (S)	108	%.	70-130		1		09/22/21 12:58	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30441056

Sample: CO30-PZM015 **Lab ID: 30441056002** Collected: 09/16/21 08:45 Received: 09/16/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**678**	ug/L	5.0	1.7	5		09/22/21 19:22	71-43-2	
Ethylbenzene	**5.0 U**	ug/L	5.0	2.0	5		09/22/21 19:22	100-41-4	
Naphthalene	**542**	ug/L	10.0	4.1	5		09/22/21 19:22	91-20-3	CH
Toluene	**49.1**	ug/L	5.0	1.6	5		09/22/21 19:22	108-88-3	
Xylene (Total)	**17.9**	ug/L	15.0	6.8	5		09/22/21 19:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%.	70-130		5		09/22/21 19:22	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%.	70-130		5		09/22/21 19:22	17060-07-0	
Toluene-d8 (S)	97	%.	70-130		5		09/22/21 19:22	2037-26-5	
Dibromofluoromethane (S)	103	%.	70-130		5		09/22/21 19:22	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30441056

Sample: GD02-MWI **Lab ID: 30441056003** Collected: 09/16/21 10:35 Received: 09/16/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**71200**	ug/L	500	169	500		09/23/21 11:25	71-43-2	
Ethylbenzene	**344**	ug/L	5.0	2.0	5		09/22/21 15:31	100-41-4	
Naphthalene	**3530**	ug/L	100	41.0	50		09/22/21 15:57	91-20-3	CH
Toluene	**84.7**	ug/L	5.0	1.6	5		09/22/21 15:31	108-88-3	
Xylene (Total)	**208**	ug/L	15.0	6.8	5		09/22/21 15:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	108	%.	70-130		5		09/22/21 15:31	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%.	70-130		5		09/22/21 15:31	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		5		09/22/21 15:31	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		5		09/22/21 15:31	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30441056

Sample: GD01-MWI **Lab ID: 30441056004** Collected: 09/16/21 15:10 Received: 09/16/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**10.3**	ug/L	1.0	0.34	1		09/22/21 13:23	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		09/22/21 13:23	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		09/22/21 13:23	91-20-3	CH
Toluene	**1.0 U**	ug/L	1.0	0.32	1		09/22/21 13:23	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		09/22/21 13:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	108	%.	70-130		1		09/22/21 13:23	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%.	70-130		1		09/22/21 13:23	17060-07-0	
Toluene-d8 (S)	95	%.	70-130		1		09/22/21 13:23	2037-26-5	
Dibromofluoromethane (S)	104	%.	70-130		1		09/22/21 13:23	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30441056

QC Batch: 465086 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30441056001, 30441056002, 30441056003, 30441056004

METHOD BLANK: 2245833 Matrix: Water
Associated Lab Samples: 30441056001, 30441056002, 30441056003, 30441056004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	09/22/21 12:06	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	09/22/21 12:06	
Naphthalene	ug/L	2.0 U	2.0	0.82	09/22/21 12:06	CH
Toluene	ug/L	1.0 U	1.0	0.32	09/22/21 12:06	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	09/22/21 12:06	
1,2-Dichloroethane-d4 (S)	%.	103	70-130		09/22/21 12:06	
4-Bromofluorobenzene (S)	%.	108	70-130		09/22/21 12:06	
Dibromofluoromethane (S)	%.	106	70-130		09/22/21 12:06	
Toluene-d8 (S)	%.	96	70-130		09/22/21 12:06	

LABORATORY CONTROL SAMPLE: 2245834

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.9	99	70-130	
Ethylbenzene	ug/L	20	19.9	100	70-130	
Naphthalene	ug/L	20	31.7	158	55-160	CH
Toluene	ug/L	20	19.9	99	70-130	
Xylene (Total)	ug/L	60	58.6	98	70-130	
1,2-Dichloroethane-d4 (S)	%.			104	70-130	
4-Bromofluorobenzene (S)	%.			105	70-130	
Dibromofluoromethane (S)	%.			106	70-130	
Toluene-d8 (S)	%.			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2245835 2245836

Parameter	Units	30441056004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	10.3	20	20	30.5	31.5	101	106	50-149	3	30	
Ethylbenzene	ug/L	1.0 U	20	20	16.4	18.3	82	91	63-135	11	30	
Naphthalene	ug/L	2.0 U	20	20	24.8	26.8	123	133	30-157	8	30	CH
Toluene	ug/L	1.0 U	20	20	17.3	18.4	87	92	59-139	6	30	
Xylene (Total)	ug/L	3.0 U	60	60	49.1	54.2	82	90	63-135	10	30	
1,2-Dichloroethane-d4 (S)	%.						106	104	70-130			
4-Bromofluorobenzene (S)	%.						108	107	70-130			
Dibromofluoromethane (S)	%.						104	104	70-130			
Toluene-d8 (S)	%.						98	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30441056

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30441056

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30441056001	**Trip Blank Wt 1**	EPA 8260B	465086		
30441056002	**CO30-PZM015**	EPA 8260B	465086		
30441056003	**GD02-MWI**	EPA 8260B	465086		
30441056004	**GD01-MWI**	EPA 8260B	465086		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request

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

WO# : 30441056

30441056

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd. Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	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

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	$Na_2S_2O_3$	Other	DI Water	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	—			9/16/21	—		2				2					X		001
2	C030-PZM015	WT	G				0845		3				HCl					X		002
3	GD02-MWI	WT	G				1035		3				HCl					X		003
4	GD01-MWI	WT	G				1510		3				HCl					X		004
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions		
Data Package Required? (Y/N): No		9/16/21	1550	Pace	9/16/21	1550			
Data Validation Required? (Y/N): No	Pace	9/6/21	1854	RDS PACE	9-16-21	1855	Y		
If data package is required, attach data package checklist.	RDS PACE	9-16-21	2215	Marlow Villamor	9-16-21	2215	Y	N	Y
							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): 9/16/21

"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."

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Trackpoint Atlantic Project # #3044056

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label ML
LIMS Login ML

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 17 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.3 °C Correction Factor: -1.1 °C Final Temp: 2.4 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: ML 9/17/2021
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed ML	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present: Trip Blank Custody Seals Present	✓ ✓			18.	
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: Survey Meter SN:

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 01, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30450545

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on November 16, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Megan Smetanka

Megan J. Smetanka
megan.smetanka@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Kaye Guille, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30450545

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30450545

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30450545001	**C039-PZM007**	Water	11/16/21 09:15	11/16/21 22:45
30450545002	**C039-PZM042**	Water	11/16/21 10:20	11/16/21 22:45
30450545003	**C027-PZM046**	Water	11/16/21 11:30	11/16/21 22:45
30450545004	**C027-PZM012**	Water	11/16/21 12:10	11/16/21 22:45
30450545005	**C036-PZM008**	Water	11/16/21 13:00	11/16/21 22:45
30450545006	**C036-PZM043**	Water	11/16/21 14:10	11/16/21 22:45
30450545007	**C040-PZM008**	Water	11/16/21 15:15	11/16/21 22:45
30450545008	**Trip Blank Wt 1**	Water	11/16/21 00:01	11/16/21 22:45

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30450545

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30450545001	**C039-PZM007**	EPA 8260B	LEL	9	PASI-PA
30450545002	**C039-PZM042**	EPA 8260B	LEL	9	PASI-PA
30450545003	**C027-PZM046**	EPA 8260B	LEL	9	PASI-PA
30450545004	**C027-PZM012**	EPA 8260B	LEL	9	PASI-PA
30450545005	**C036-PZM008**	EPA 8260B	LEL	9	PASI-PA
30450545006	**C036-PZM043**	EPA 8260B	LEL	9	PASI-PA
30450545007	**C040-PZM008**	EPA 8260B	LEL	9	PASI-PA
30450545008	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30450545

Sample: C039-PZM007 **Lab ID: 30450545001** Collected: 11/16/21 09:15 Received: 11/16/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**9720**	ug/L	20.0	6.8	20		11/30/21 14:58	71-43-2	E
Ethylbenzene	**39.5**	ug/L	1.0	0.40	1		11/30/21 14:33	100-41-4	
Naphthalene	**1340**	ug/L	40.0	16.4	20		11/30/21 14:58	91-20-3	
Toluene	**1640**	ug/L	20.0	6.3	20		11/30/21 14:58	108-88-3	
Xylene (Total)	**374**	ug/L	3.0	1.4	1		11/30/21 14:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	70-130		1		11/30/21 14:33	460-00-4	
1,2-Dichloroethane-d4 (S)	138	%.	70-130		1		11/30/21 14:33	17060-07-0	ST
Toluene-d8 (S)	97	%.	70-130		1		11/30/21 14:33	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		1		11/30/21 14:33	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30450545

Sample: C039-PZM042 **Lab ID: 30450545002** Collected: 11/16/21 10:20 Received: 11/16/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**9520**	ug/L	200	67.6	200		11/30/21 16:39	71-43-2	
Ethylbenzene	**70.4**	ug/L	5.0	2.0	5		11/30/21 16:14	100-41-4	
Naphthalene	**1420**	ug/L	10.0	4.1	5		11/30/21 16:14	91-20-3	
Toluene	**2150**	ug/L	200	63.4	200		11/30/21 16:39	108-88-3	
Xylene (Total)	**595**	ug/L	15.0	6.8	5		11/30/21 16:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		5		11/30/21 16:14	460-00-4	
1,2-Dichloroethane-d4 (S)	135	%.	70-130		5		11/30/21 16:14	17060-07-0	ST
Toluene-d8 (S)	106	%.	70-130		5		11/30/21 16:14	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		5		11/30/21 16:14	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30450545

Sample: C027-PZM046 **Lab ID: 30450545003** Collected: 11/16/21 11:30 Received: 11/16/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**18700**	ug/L	1000	338	1000		11/30/21 19:11	71-43-2	
Ethylbenzene	**247**	ug/L	5.0	2.0	5		11/30/21 18:46	100-41-4	
Naphthalene	**1450**	ug/L	10.0	4.1	5		11/30/21 18:46	91-20-3	
Toluene	**6180**	ug/L	1000	317	1000		11/30/21 19:11	108-88-3	
Xylene (Total)	**2070**	ug/L	15.0	6.8	5		11/30/21 18:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	70-130		5		11/30/21 18:46	460-00-4	
1,2-Dichloroethane-d4 (S)	135	%.	70-130		5		11/30/21 18:46	17060-07-0	ST
Toluene-d8 (S)	97	%.	70-130		5		11/30/21 18:46	2037-26-5	
Dibromofluoromethane (S)	106	%.	70-130		5		11/30/21 18:46	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30450545

Sample: C027-PZM012 **Lab ID: 30450545004** Collected: 11/16/21 12:10 Received: 11/16/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**8340**	ug/L	100	33.8	100		11/30/21 15:49	71-43-2	
Ethylbenzene	**98.9**	ug/L	5.0	2.0	5		11/30/21 15:24	100-41-4	
Naphthalene	**661**	ug/L	10.0	4.1	5		11/30/21 15:24	91-20-3	
Toluene	**2430**	ug/L	100	31.7	100		11/30/21 15:49	108-88-3	
Xylene (Total)	**795**	ug/L	15.0	6.8	5		11/30/21 15:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		5		11/30/21 15:24	460-00-4	
1,2-Dichloroethane-d4 (S)	125	%.	70-130		5		11/30/21 15:24	17060-07-0	
Toluene-d8 (S)	99	%.	70-130		5		11/30/21 15:24	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		5		11/30/21 15:24	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30450545

Sample: C036-PZM008 **Lab ID: 30450545005** Collected: 11/16/21 13:00 Received: 11/16/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**20400**	ug/L	500	169	500		11/30/21 17:30	71-43-2	
Ethylbenzene	**89.5**	ug/L	5.0	2.0	5		11/30/21 17:05	100-41-4	
Naphthalene	**943**	ug/L	10.0	4.1	5		11/30/21 17:05	91-20-3	
Toluene	**4460**	ug/L	500	158	500		11/30/21 17:30	108-88-3	
Xylene (Total)	**1510**	ug/L	15.0	6.8	5		11/30/21 17:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	70-130		5		11/30/21 17:05	460-00-4	
1,2-Dichloroethane-d4 (S)	136	%.	70-130		5		11/30/21 17:05	17060-07-0	ST
Toluene-d8 (S)	99	%.	70-130		5		11/30/21 17:05	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		5		11/30/21 17:05	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30450545

Sample: C036-PZM043 **Lab ID: 30450545006** Collected: 11/16/21 14:10 Received: 11/16/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**26700**	ug/L	500	169	500		11/30/21 18:20	71-43-2	
Ethylbenzene	**56.2**	ug/L	5.0	2.0	5		11/30/21 17:55	100-41-4	
Naphthalene	**667**	ug/L	10.0	4.1	5		11/30/21 17:55	91-20-3	
Toluene	**3710**	ug/L	500	158	500		11/30/21 18:20	108-88-3	
Xylene (Total)	**855**	ug/L	15.0	6.8	5		11/30/21 17:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		5		11/30/21 17:55	460-00-4	
1,2-Dichloroethane-d4 (S)	131	%.	70-130		5		11/30/21 17:55	17060-07-0	ST
Toluene-d8 (S)	96	%.	70-130		5		11/30/21 17:55	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		5		11/30/21 17:55	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30450545

Sample: C040-PZM008 **Lab ID: 30450545007** Collected: 11/16/21 15:15 Received: 11/16/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**2880**	ug/L	5.0	1.7	5		11/30/21 14:08	71-43-2	E
Ethylbenzene	**20.8**	ug/L	5.0	2.0	5		11/30/21 14:08	100-41-4	
Naphthalene	**1570**	ug/L	10.0	4.1	5		11/30/21 14:08	91-20-3	
Toluene	**291**	ug/L	5.0	1.6	5		11/30/21 14:08	108-88-3	
Xylene (Total)	**153**	ug/L	15.0	6.8	5		11/30/21 14:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	70-130		5		11/30/21 14:08	460-00-4	
1,2-Dichloroethane-d4 (S)	132	%.	70-130		5		11/30/21 14:08	17060-07-0	ST
Toluene-d8 (S)	98	%.	70-130		5		11/30/21 14:08	2037-26-5	
Dibromofluoromethane (S)	102	%.	70-130		5		11/30/21 14:08	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30450545

Sample: Trip Blank Wt 1 **Lab ID: 30450545008** Collected: 11/16/21 00:01 Received: 11/16/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		11/30/21 13:42	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		11/30/21 13:42	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		11/30/21 13:42	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		11/30/21 13:42	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		11/30/21 13:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%.	70-130		1		11/30/21 13:42	460-00-4	
1,2-Dichloroethane-d4 (S)	131	%.	70-130		1		11/30/21 13:42	17060-07-0	S3, ST
Toluene-d8 (S)	105	%.	70-130		1		11/30/21 13:42	2037-26-5	
Dibromofluoromethane (S)	107	%.	70-130		1		11/30/21 13:42	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30450545

QC Batch: 474345 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30450545001, 30450545002, 30450545003, 30450545004, 30450545005, 30450545006, 30450545007, 30450545008

METHOD BLANK: 2291563 Matrix: Water
Associated Lab Samples: 30450545001, 30450545002, 30450545003, 30450545004, 30450545005, 30450545006, 30450545007, 30450545008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	11/30/21 12:27	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	11/30/21 12:27	
Naphthalene	ug/L	2.0 U	2.0	0.82	11/30/21 12:27	
Toluene	ug/L	1.0 U	1.0	0.32	11/30/21 12:27	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	11/30/21 12:27	
1,2-Dichloroethane-d4 (S)	%.	132	70-130		11/30/21 12:27	S3,ST
4-Bromofluorobenzene (S)	%.	99	70-130		11/30/21 12:27	
Dibromofluoromethane (S)	%.	102	70-130		11/30/21 12:27	
Toluene-d8 (S)	%.	100	70-130		11/30/21 12:27	

LABORATORY CONTROL SAMPLE: 2291564

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.5	102	70-130	
Ethylbenzene	ug/L	20	20.0	100	70-130	
Naphthalene	ug/L	20	19.8	99	55-160	
Toluene	ug/L	20	19.9	99	70-130	
Xylene (Total)	ug/L	60	60.2	100	70-130	
1,2-Dichloroethane-d4 (S)	%.			132	70-130	ST
4-Bromofluorobenzene (S)	%.			96	70-130	
Dibromofluoromethane (S)	%.			103	70-130	
Toluene-d8 (S)	%.			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2291565 2291566

Parameter	Units	30450556001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<1.0	20	20	17.8	17.8	87	87	50-149	0	30	
Ethylbenzene	ug/L	<1.0	20	20	17.3	16.0	86	80	63-135	8	30	
Naphthalene	ug/L	<2.0	20	20	16.8	15.8	84	79	30-157	6	30	
Toluene	ug/L	8.3	20	20	24.7	24.1	82	79	59-139	3	30	
Xylene (Total)	ug/L	<3.0	60	60	50.4	49.3	83	81	63-135	2	30	
1,2-Dichloroethane-d4 (S)	%.						141	148	70-130			ST
4-Bromofluorobenzene (S)	%.						99	101	70-130			
Dibromofluoromethane (S)	%.						111	113	70-130			
Toluene-d8 (S)	%.						97	96	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30450545

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.
ST	Surrogate recovery was above laboratory control limits. Results may be biased high.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30450545

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30450545001	**C039-PZM007**	EPA 8260B	474345		
30450545002	**C039-PZM042**	EPA 8260B	474345		
30450545003	**C027-PZM046**	EPA 8260B	474345		
30450545004	**C027-PZM012**	EPA 8260B	474345		
30450545005	**C036-PZM008**	EPA 8260B	474345		
30450545006	**C036-PZM043**	EPA 8260B	474345		
30450545007	**C040-PZM008**	EPA 8260B	474345		
30450545008	**Trip Blank Wt 1**	EPA 8260B	474345		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 30450545

30450545

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-			11/16/21	~		2				2						X		001 008
2	C039-PZM007	WT	G				915		3				3						X		002 001
3	C039-PZM042	WT	G				1020		3				3						X		003 002
4	C027-PZM046	WT	G				1130		3				3						X		004 003
5	C027-PZM012	WT	G				1210		3				3						X		005 004
6	C036-PZM008	WT	G				1300		3				3						X		006 005
7	C036-PZM043	WT	G				1410		3				3						X		007 006
8	C040-PZM008	WT	G				1515		3				3						X		008 007
9																					
10																					
11																					
12																					

Rm 11-17-21

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions		
Data Package Required? (Y/N): No		11/4/21	1555						
Data Validation Required? (Y/N): No		11/16/21	1935		11/16/21	1935			
If data package is required, attach data package checklist.		11/16/21	2245		11-16-21	2245	2.8	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 11/16/21

Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint AH Project #

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

Label
LIMS Login

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☑ yes ☑ no 11-17-21

Thermometer Used Type of Ice: Wet Blue None

Cooler Temperature Observed Temp °C Correction Factor: °C Final Temp: °C

Temp should be above freezing to 6°C

WO#: 30450545

PM: MS1 Due Date: 11/24/21

CLIENT: TRADEPOINT

Comments:	Yes	No	N/A	pH paper Lot# ND3801 / Date and Initials of person examining contents: 11-17-21
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 sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed: Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

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 08, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30452749

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on November 30, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Megan Smetanka

Megan J. Smetanka
megan.smetanka@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Kaye Guille, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30452749

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30452749

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30452749001	**Trip Blank Wt 1**	Water	11/30/21 00:01	11/30/21 21:45
30452749002	**CO38-PZM006**	Water	11/30/21 13:25	11/30/21 21:45
30452749003	**CO38-PZM043**	Water	11/30/21 14:50	11/30/21 21:45

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30452749

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30452749001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30452749002	**CO38-PZM006**	EPA 8260B	LEL	9	PASI-PA
30452749003	**CO38-PZM043**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30452749

Sample: Trip Blank Wt 1 **Lab ID: 30452749001** Collected: 11/30/21 00:01 Received: 11/30/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		12/07/21 14:52	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/07/21 14:52	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		12/07/21 14:52	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		12/07/21 14:52	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		12/07/21 14:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		12/07/21 14:52	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%.	70-130		1		12/07/21 14:52	17060-07-0	
Toluene-d8 (S)	108	%.	70-130		1		12/07/21 14:52	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		12/07/21 14:52	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30452749

Sample: CO38-PZM006 **Lab ID: 30452749002** Collected: 11/30/21 13:25 Received: 11/30/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**5070**	ug/L	50.0	16.9	50		12/07/21 23:15	71-43-2	
Ethylbenzene	**58.7**	ug/L	5.0	2.0	5		12/07/21 22:50	100-41-4	
Naphthalene	**1660**	ug/L	10.0	4.1	5		12/07/21 22:50	91-20-3	
Toluene	**1130**	ug/L	5.0	1.6	5		12/07/21 22:50	108-88-3	
Xylene (Total)	**462**	ug/L	15.0	6.8	5		12/07/21 22:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	70-130		5		12/07/21 22:50	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%.	70-130		5		12/07/21 22:50	17060-07-0	
Toluene-d8 (S)	106	%.	70-130		5		12/07/21 22:50	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		5		12/07/21 22:50	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30452749

Sample: CO38-PZM043 **Lab ID: 30452749003** Collected: 11/30/21 14:50 Received: 11/30/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		12/07/21 21:35	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/07/21 21:35	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		12/07/21 21:35	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		12/07/21 21:35	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		12/07/21 21:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		12/07/21 21:35	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%.	70-130		1		12/07/21 21:35	17060-07-0	
Toluene-d8 (S)	108	%.	70-130		1		12/07/21 21:35	2037-26-5	
Dibromofluoromethane (S)	103	%.	70-130		1		12/07/21 21:35	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30452749

QC Batch: 475253 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30452749001, 30452749002, 30452749003

METHOD BLANK: 2295860 Matrix: Water
Associated Lab Samples: 30452749001, 30452749002, 30452749003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	12/07/21 14:27	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	12/07/21 14:27	
Naphthalene	ug/L	2.0 U	2.0	0.82	12/07/21 14:27	
Toluene	ug/L	1.0 U	1.0	0.32	12/07/21 14:27	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	12/07/21 14:27	
1,2-Dichloroethane-d4 (S)	%.	110	70-130		12/07/21 14:27	
4-Bromofluorobenzene (S)	%.	105	70-130		12/07/21 14:27	
Dibromofluoromethane (S)	%.	101	70-130		12/07/21 14:27	
Toluene-d8 (S)	%.	108	70-130		12/07/21 14:27	

LABORATORY CONTROL SAMPLE: 2295861

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.6	98	70-130	
Ethylbenzene	ug/L	20	19.2	96	70-130	
Naphthalene	ug/L	20	18.1	91	55-160	
Toluene	ug/L	20	20.2	101	70-130	
Xylene (Total)	ug/L	60	57.8	96	70-130	
1,2-Dichloroethane-d4 (S)	%.			112	70-130	
4-Bromofluorobenzene (S)	%.			98	70-130	
Dibromofluoromethane (S)	%.			96	70-130	
Toluene-d8 (S)	%.			107	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2295862 2295863

Parameter	Units	30453439007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<1.0	20	20	13.9	16.7	69	84	50-149	18	30	
Ethylbenzene	ug/L	<1.0	20	20	13.4	17.0	67	85	63-135	24	30	
Naphthalene	ug/L	<2.0	20	20	11.4	14.6	57	73	30-157	24	30	
Toluene	ug/L	<1.0	20	20	14.4	17.4	72	87	59-139	19	30	
Xylene (Total)	ug/L	<3.0	60	60	40.1	49.4	67	82	63-135	21	30	
1,2-Dichloroethane-d4 (S)	%.						107	108	70-130			
4-Bromofluorobenzene (S)	%.						103	102	70-130			
Dibromofluoromethane (S)	%.						98	98	70-130			
Toluene-d8 (S)	%.						107	109	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30452749

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 2295862

[1] The pH of the VOA vial used for analysis was 7.

Sample: 2295863

[1] The pH of the VOA vial used for analysis was 7.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30452749

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30452749001	**Trip Blank Wt 1**	EPA 8260B	475253		
30452749002	**CO38-PZM006**	EPA 8260B	475253		
30452749003	**CO38-PZM043**	EPA 8260B	475253		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Reques

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

WO# : 30452749

30452749

Section A Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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

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	$Na_2S_2O_3$	Other	DI Water	Analysis Test Y/N	BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-		11/30/21		—		2				2						X		001
2	C038-PZM006	WT	G				1325		3				3						X		002
3	C038-PZM043	WT	G				1450		3				3						X		003
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions		
Data Package Required? (Y/N): No		11/30/21	1615	Jason Chandler	11/30	16:15			
Data Validation Required? (Y/N): No	Jason Chandler	11/30/21	1615	RDS Pace	11-30-21	1840	Y		
If data package is required, attach data package checklist.	RDS Pace	11-30-21	245	Marion Lang	11/30/21	21K	Y	N	Y
							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): 11/30/21

*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.

Pittsburgh Lab Sample Condition Upon Receipt

#30452749#

Pace Analytical

Client Name: Tradepoint Atlantic Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLC
LIMS Login ML

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.6 °C Correction Factor: -.1 °C Final Temp: 1.5 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and initials of person examining contents MLC 12/17/21
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: N/A	✓			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 sample field filtered		✓		13.	
Organic Samples checked for dechlorination:		✓		14.	
Filtered volume received for Dissolved tests		✓		15.	
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed MLC	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

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 10, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30452955

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on December 01, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Megan Smetanka

Megan J. Smetanka
megan.smetanka@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Kaye Guille, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30452955

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30452955

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30452955001	**Trip Blank Wt 1**	Water	12/01/21 00:01	12/01/21 22:30
30452955002	**CO37-PZM038**	Water	12/01/21 08:25	12/01/21 22:30
30452955003	**CO42-PZM004**	Water	12/01/21 09:50	12/01/21 22:30
30452955004	**CO41-PZM001**	Water	12/01/21 10:10	12/01/21 22:30
30452955005	**CO41-PZM036**	Water	12/01/21 12:20	12/01/21 22:30
30452955006	**CO182-MWI**	Water	12/01/21 13:45	12/01/21 22:30
30452955007	**CO56-PZP001**	Water	12/01/21 15:00	12/01/21 22:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30452955

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30452955001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30452955002	**CO37-PZM038**	EPA 8260B	LEL	9	PASI-PA
30452955003	**CO42-PZM004**	EPA 8260B	LEL	9	PASI-PA
30452955004	**CO41-PZM001**	EPA 8260B	LEL	9	PASI-PA
30452955005	**CO41-PZM036**	EPA 8260B	LEL	9	PASI-PA
30452955006	**CO182-MWI**	EPA 8260B	LEL	9	PASI-PA
30452955007	**CO56-PZP001**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30452955

Sample: Trip Blank Wt 1 **Lab ID: 30452955001** Collected: 12/01/21 00:01 Received: 12/01/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		12/08/21 13:30	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/08/21 13:30	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		12/08/21 13:30	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		12/08/21 13:30	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		12/08/21 13:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	70-130		1		12/08/21 13:30	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		1		12/08/21 13:30	17060-07-0	
Toluene-d8 (S)	103	%.	70-130		1		12/08/21 13:30	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		12/08/21 13:30	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30452955

Sample: CO37-PZM038 **Lab ID: 30452955002** Collected: 12/01/21 08:25 Received: 12/01/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**17800**	ug/L	200	67.6	200		12/08/21 20:38	71-43-2	
Ethylbenzene	**279**	ug/L	5.0	2.0	5		12/08/21 20:13	100-41-4	
Naphthalene	**1590**	ug/L	10.0	4.1	5		12/08/21 20:13	91-20-3	
Toluene	**10300**	ug/L	200	63.4	200		12/08/21 20:38	108-88-3	
Xylene (Total)	**2370**	ug/L	15.0	6.8	5		12/08/21 20:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		5		12/08/21 20:13	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		5		12/08/21 20:13	17060-07-0	
Toluene-d8 (S)	104	%.	70-130		5		12/08/21 20:13	2037-26-5	
Dibromofluoromethane (S)	94	%.	70-130		5		12/08/21 20:13	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30452955

Sample: CO42-PZM004 **Lab ID: 30452955003** Collected: 12/01/21 09:50 Received: 12/01/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**169**	ug/L	1.0	0.34	1		12/08/21 14:46	71-43-2	
Ethylbenzene	**30.2**	ug/L	1.0	0.40	1		12/08/21 14:46	100-41-4	
Naphthalene	**109**	ug/L	2.0	0.82	1		12/08/21 14:46	91-20-3	
Toluene	**36.0**	ug/L	1.0	0.32	1		12/08/21 14:46	108-88-3	
Xylene (Total)	**129**	ug/L	3.0	1.4	1		12/08/21 14:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		1		12/08/21 14:46	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%.	70-130		1		12/08/21 14:46	17060-07-0	
Toluene-d8 (S)	103	%.	70-130		1		12/08/21 14:46	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		12/08/21 14:46	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30452955

Sample: CO41-PZM001 **Lab ID: 30452955004** Collected: 12/01/21 10:10 Received: 12/01/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**17400**	ug/L	100	33.8	100		12/09/21 21:51	71-43-2	M5
Ethylbenzene	**564**	ug/L	100	39.8	100		12/09/21 21:51	100-41-4	M5
Naphthalene	**332**	ug/L	2.0	0.82	1		12/09/21 14:02	91-20-3	M5
Toluene	**11200**	ug/L	100	31.7	100		12/09/21 21:51	108-88-3	M5
Xylene (Total)	**5190**	ug/L	300	135	100		12/09/21 21:51	1330-20-7	M5
Surrogates									
4-Bromofluorobenzene (S)	99	%.	70-130		1		12/09/21 14:02	460-00-4	M5
1,2-Dichloroethane-d4 (S)	101	%.	70-130		1		12/09/21 14:02	17060-07-0	M5
Toluene-d8 (S)	101	%.	70-130		1		12/09/21 14:02	2037-26-5	M5
Dibromofluoromethane (S)	91	%.	70-130		1		12/09/21 14:02	1868-53-7	M5

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30452955

Sample: CO41-PZM036 **Lab ID: 30452955005** Collected: 12/01/21 12:20 Received: 12/01/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**351000**	ug/L	2000	676	2000		12/08/21 22:19	71-43-2	
Ethylbenzene	**880**	ug/L	5.0	2.0	5		12/08/21 21:54	100-41-4	
Naphthalene	**290**	ug/L	10.0	4.1	5		12/08/21 21:54	91-20-3	
Toluene	**118000**	ug/L	2000	634	2000		12/08/21 22:19	108-88-3	
Xylene (Total)	**27300**	ug/L	6000	2700	2000		12/08/21 22:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	115	%.	70-130		5		12/08/21 21:54	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		5		12/08/21 21:54	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		5		12/08/21 21:54	2037-26-5	
Dibromofluoromethane (S)	87	%.	70-130		5		12/08/21 21:54	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30452955

Sample: CO182-MWI **Lab ID: 30452955006** Collected: 12/01/21 13:45 Received: 12/01/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**336000**	ug/L	1000	338	1000		12/08/21 21:29	71-43-2	
Ethylbenzene	**1010**	ug/L	5.0	2.0	5		12/08/21 21:04	100-41-4	
Naphthalene	**218**	ug/L	10.0	4.1	5		12/08/21 21:04	91-20-3	
Toluene	**40000**	ug/L	1000	317	1000		12/08/21 21:29	108-88-3	
Xylene (Total)	**12900**	ug/L	3000	1350	1000		12/08/21 21:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	114	%.	70-130		5		12/08/21 21:04	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		5		12/08/21 21:04	17060-07-0	
Toluene-d8 (S)	101	%.	70-130		5		12/08/21 21:04	2037-26-5	
Dibromofluoromethane (S)	86	%.	70-130		5		12/08/21 21:04	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30452955

Sample: CO56-PZP001 **Lab ID: 30452955007** Collected: 12/01/21 15:00 Received: 12/01/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**300**	ug/L	5.0	1.7	5		12/08/21 15:37	71-43-2	
Ethylbenzene	**10.4**	ug/L	5.0	2.0	5		12/08/21 15:37	100-41-4	
Naphthalene	**3290**	ug/L	10.0	4.1	5		12/08/21 15:37	91-20-3	E
Toluene	**91.6**	ug/L	5.0	1.6	5		12/08/21 15:37	108-88-3	
Xylene (Total)	**244**	ug/L	15.0	6.8	5		12/08/21 15:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		5		12/08/21 15:37	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%.	70-130		5		12/08/21 15:37	17060-07-0	
Toluene-d8 (S)	105	%.	70-130		5		12/08/21 15:37	2037-26-5	
Dibromofluoromethane (S)	102	%.	70-130		5		12/08/21 15:37	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30452955

QC Batch: 475435 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30452955001, 30452955002, 30452955003, 30452955005, 30452955006, 30452955007

METHOD BLANK: 2296614 Matrix: Water
Associated Lab Samples: 30452955001, 30452955002, 30452955003, 30452955005, 30452955006, 30452955007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	12/08/21 13:05	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	12/08/21 13:05	
Naphthalene	ug/L	2.0 U	2.0	0.82	12/08/21 13:05	
Toluene	ug/L	1.0 U	1.0	0.32	12/08/21 13:05	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	12/08/21 13:05	
1,2-Dichloroethane-d4 (S)	%.	105	70-130		12/08/21 13:05	
4-Bromofluorobenzene (S)	%.	110	70-130		12/08/21 13:05	
Dibromofluoromethane (S)	%.	102	70-130		12/08/21 13:05	
Toluene-d8 (S)	%.	104	70-130		12/08/21 13:05	

LABORATORY CONTROL SAMPLE: 2296615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.6	93	70-130	
Ethylbenzene	ug/L	20	19.0	95	70-130	
Naphthalene	ug/L	20	16.5	83	55-160	
Toluene	ug/L	20	18.9	94	70-130	
Xylene (Total)	ug/L	60	56.1	93	70-130	
1,2-Dichloroethane-d4 (S)	%.			101	70-130	
4-Bromofluorobenzene (S)	%.			102	70-130	
Dibromofluoromethane (S)	%.			101	70-130	
Toluene-d8 (S)	%.			105	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2296616 2296617

Parameter	Units	30453173002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	1.6	20	20	20.2	20.9	93	96	50-149	3	30	
Ethylbenzene	ug/L	1.0 U	20	20	16.0	18.1	79	90	63-135	12	30	
Naphthalene	ug/L	5.4	20	20	21.9	24.2	83	94	30-157	10	30	
Toluene	ug/L	1.2	20	20	18.0	19.5	84	91	59-139	8	30	
Xylene (Total)	ug/L	1.5J	60	60	48.7	55.0	79	89	63-135	12	30	
1,2-Dichloroethane-d4 (S)	%.						95	94	70-130			
4-Bromofluorobenzene (S)	%.						107	106	70-130			
Dibromofluoromethane (S)	%.						100	100	70-130			
Toluene-d8 (S)	%.						102	104	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30452955

QC Batch: 475613
QC Batch Method: EPA 8260B
Analysis Method: EPA 8260B
Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30452955004

METHOD BLANK: 2297355 Matrix: Water
Associated Lab Samples: 30452955004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	12/09/21 13:36	M5
Ethylbenzene	ug/L	1.0 U	1.0	0.40	12/09/21 13:36	M5
Naphthalene	ug/L	2.0 U	2.0	0.82	12/09/21 13:36	M5
Toluene	ug/L	1.0 U	1.0	0.32	12/09/21 13:36	M5
Xylene (Total)	ug/L	3.0 U	3.0	1.4	12/09/21 13:36	M5
1,2-Dichloroethane-d4 (S)	%.	97	70-130		12/09/21 13:36	M5
4-Bromofluorobenzene (S)	%.	107	70-130		12/09/21 13:36	M5
Dibromofluoromethane (S)	%.	100	70-130		12/09/21 13:36	M5
Toluene-d8 (S)	%.	104	70-130		12/09/21 13:36	M5

LABORATORY CONTROL SAMPLE: 2297356

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.2	96	70-130	M5
Ethylbenzene	ug/L	20	20.0	100	70-130	M5
Naphthalene	ug/L	20	18.5	92	55-160	M5
Toluene	ug/L	20	20.0	100	70-130	M5
Xylene (Total)	ug/L	60	59.7	100	70-130	M5
1,2-Dichloroethane-d4 (S)	%.			95	70-130	M5
4-Bromofluorobenzene (S)	%.			106	70-130	M5
Dibromofluoromethane (S)	%.			99	70-130	M5
Toluene-d8 (S)	%.			107	70-130	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30452955

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 475613

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30452955

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30452955001	**Trip Blank Wt 1**	EPA 8260B	475435		
30452955002	**CO37-PZM038**	EPA 8260B	475435		
30452955003	**CO42-PZM004**	EPA 8260B	475435		
30452955004	**CO41-PZM001**	EPA 8260B	475613		
30452955005	**CO41-PZM036**	EPA 8260B	475435		
30452955006	**CO182-MWI**	EPA 8260B	475435		
30452955007	**CO56-PZP001**	EPA 8260B	475435		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request

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

WO# : 30452955

30452955

Section A Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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

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	$Na_2S_2O_3$	Other	DI Water	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-			12/1/21	—		2				2					×		
2	C037-PZM038	WT	G				825		3				3					X		001
3	C042-PZM004	WT	G				950		3				3					X		002
4	C041-PZM001	WT	G				1110		3				3					X		003
5	C041-PZM036	WT	G				1220		3				3					X		004
6	C082-MW1	WT	G				1345		3				3					X		005
7	C056-PZP001	WT	G				1500		3				3					X		006
8																				007
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No		12/1/21	1550		12/1/21	16.53
Data Validation Required? (Y/N): No		12/1/21	1831	CRDS PACE	12-1-21	1855
If data package is required, attach data package checklist.	CRDS PACE	12-1-21	2230	Marwin L Ware	12-1-2021	2230

Sample Conditions		
Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perry

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 12/1/21

"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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project # #30452955#

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label MLC
LIMS Login MLC

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 2.7 °C Correction Factor: -.4 °C Final Temp: 1.8 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MLC 12/2/2021
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed MLC	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):	✓			17. Sample 001 has one vial with headspace 7mm	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

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 10, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30453173

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on December 02, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Megan Smetanka

Megan J. Smetanka
megan.smetanka@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Kaye Guille, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30453173

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30453173

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30453173001	**Trip Blank Wt 1**	Water	12/02/21 00:01	12/02/21 22:15
30453173002	**CO55-PZM000**	Water	12/02/21 08:50	12/02/21 22:15
30453173003	**CO24-PZM007**	Water	12/02/21 09:45	12/02/21 22:15
30453173004	**CO23-PZM008**	Water	12/02/21 11:00	12/02/21 22:15
30453173005	**CO60-PZP001**	Water	12/02/21 12:10	12/02/21 22:15
30453173006	**CO26-PZM007**	Water	12/02/21 13:50	12/02/21 22:15
30453173007	**CO58-PZM001**	Water	12/02/21 14:45	12/02/21 22:15

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30453173

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30453173001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30453173002	**CO55-PZM000**	EPA 8260B	LEL	9	PASI-PA
30453173003	**CO24-PZM007**	EPA 8260B	LEL	9	PASI-PA
30453173004	**CO23-PZM008**	EPA 8260B	LEL	9	PASI-PA
30453173005	**CO60-PZP001**	EPA 8260B	LEL	9	PASI-PA
30453173006	**CO26-PZM007**	EPA 8260B	LEL	9	PASI-PA
30453173007	**CO58-PZM001**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30453173

Sample: Trip Blank Wt 1 **Lab ID: 30453173001** Collected: 12/02/21 00:01 Received: 12/02/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		12/08/21 13:56	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/08/21 13:56	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		12/08/21 13:56	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		12/08/21 13:56	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		12/08/21 13:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		1		12/08/21 13:56	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		1		12/08/21 13:56	17060-07-0	
Toluene-d8 (S)	102	%.	70-130		1		12/08/21 13:56	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		12/08/21 13:56	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30453173

Sample: CO55-PZM000 **Lab ID: 30453173002** Collected: 12/02/21 08:50 Received: 12/02/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.6**	ug/L	1.0	0.34	1		12/08/21 14:21	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/08/21 14:21	100-41-4	
Naphthalene	**5.4**	ug/L	2.0	0.82	1		12/08/21 14:21	91-20-3	
Toluene	**1.2**	ug/L	1.0	0.32	1		12/08/21 14:21	108-88-3	
Xylene (Total)	**1.5J**	ug/L	3.0	1.4	1		12/08/21 14:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		12/08/21 14:21	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		1		12/08/21 14:21	17060-07-0	
Toluene-d8 (S)	103	%.	70-130		1		12/08/21 14:21	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		12/08/21 14:21	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30453173

Sample: CO24-PZM007 **Lab ID: 30453173003** Collected: 12/02/21 09:45 Received: 12/02/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**2.3**	ug/L	1.0	0.34	1		12/08/21 16:02	71-43-2	
Ethylbenzene	**2.1**	ug/L	1.0	0.40	1		12/08/21 16:02	100-41-4	
Naphthalene	**2390**	ug/L	100	41.0	50		12/08/21 16:27	91-20-3	
Toluene	**1.4**	ug/L	1.0	0.32	1		12/08/21 16:02	108-88-3	
Xylene (Total)	**3.0**	ug/L	3.0	1.4	1		12/08/21 16:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		1		12/08/21 16:02	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%.	70-130		1		12/08/21 16:02	17060-07-0	
Toluene-d8 (S)	105	%.	70-130		1		12/08/21 16:02	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		1		12/08/21 16:02	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30453173

Sample: CO23-PZM008 **Lab ID: 30453173004** Collected: 12/02/21 11:00 Received: 12/02/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**606**	ug/L	5.0	1.7	5		12/08/21 19:23	71-43-2	
Ethylbenzene	**32.6**	ug/L	5.0	2.0	5		12/08/21 19:23	100-41-4	
Naphthalene	**4120**	ug/L	100	41.0	50		12/08/21 19:48	91-20-3	
Toluene	**343**	ug/L	5.0	1.6	5		12/08/21 19:23	108-88-3	
Xylene (Total)	**525**	ug/L	15.0	6.8	5		12/08/21 19:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	70-130		5		12/08/21 19:23	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%.	70-130		5		12/08/21 19:23	17060-07-0	
Toluene-d8 (S)	103	%.	70-130		5		12/08/21 19:23	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		5		12/08/21 19:23	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30453173

Sample: CO60-PZP001 **Lab ID: 30453173005** Collected: 12/02/21 12:10 Received: 12/02/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**259**	ug/L	1.0	0.34	1		12/08/21 16:52	71-43-2	
Ethylbenzene	**8.0**	ug/L	1.0	0.40	1		12/08/21 16:52	100-41-4	
Naphthalene	**2670**	ug/L	100	41.0	50		12/08/21 17:17	91-20-3	
Toluene	**37.8**	ug/L	1.0	0.32	1		12/08/21 16:52	108-88-3	
Xylene (Total)	**184**	ug/L	3.0	1.4	1		12/08/21 16:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		12/08/21 16:52	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	70-130		1		12/08/21 16:52	17060-07-0	
Toluene-d8 (S)	105	%.	70-130		1		12/08/21 16:52	2037-26-5	
Dibromofluoromethane (S)	98	%.	70-130		1		12/08/21 16:52	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30453173

Sample: CO26-PZM007 **Lab ID: 30453173006** Collected: 12/02/21 13:50 Received: 12/02/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**327**	ug/L	1.0	0.34	1		12/08/21 17:42	71-43-2	
Ethylbenzene	**10.7**	ug/L	1.0	0.40	1		12/08/21 17:42	100-41-4	
Naphthalene	**2880**	ug/L	20.0	8.2	10		12/08/21 18:08	91-20-3	
Toluene	**179**	ug/L	1.0	0.32	1		12/08/21 17:42	108-88-3	
Xylene (Total)	**250**	ug/L	3.0	1.4	1		12/08/21 17:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		1		12/08/21 17:42	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		1		12/08/21 17:42	17060-07-0	
Toluene-d8 (S)	104	%.	70-130		1		12/08/21 17:42	2037-26-5	
Dibromofluoromethane (S)	103	%.	70-130		1		12/08/21 17:42	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30453173

Sample: CO58-PZM001 **Lab ID: 30453173007** Collected: 12/02/21 14:45 Received: 12/02/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**177**	ug/L	1.0	0.34	1		12/08/21 18:33	71-43-2	
Ethylbenzene	**9.1**	ug/L	1.0	0.40	1		12/08/21 18:33	100-41-4	
Naphthalene	**698**	ug/L	100	41.0	50		12/08/21 18:58	91-20-3	
Toluene	**55.4**	ug/L	1.0	0.32	1		12/08/21 18:33	108-88-3	
Xylene (Total)	**142**	ug/L	3.0	1.4	1		12/08/21 18:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	70-130		1		12/08/21 18:33	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%.	70-130		1		12/08/21 18:33	17060-07-0	
Toluene-d8 (S)	103	%.	70-130		1		12/08/21 18:33	2037-26-5	
Dibromofluoromethane (S)	96	%.	70-130		1		12/08/21 18:33	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30453173

QC Batch: 475435 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30453173001, 30453173002, 30453173003, 30453173004, 30453173005, 30453173006, 30453173007

METHOD BLANK: 2296614 Matrix: Water
Associated Lab Samples: 30453173001, 30453173002, 30453173003, 30453173004, 30453173005, 30453173006, 30453173007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	12/08/21 13:05	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	12/08/21 13:05	
Naphthalene	ug/L	2.0 U	2.0	0.82	12/08/21 13:05	
Toluene	ug/L	1.0 U	1.0	0.32	12/08/21 13:05	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	12/08/21 13:05	
1,2-Dichloroethane-d4 (S)	%.	105	70-130		12/08/21 13:05	
4-Bromofluorobenzene (S)	%.	110	70-130		12/08/21 13:05	
Dibromofluoromethane (S)	%.	102	70-130		12/08/21 13:05	
Toluene-d8 (S)	%.	104	70-130		12/08/21 13:05	

LABORATORY CONTROL SAMPLE: 2296615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.6	93	70-130	
Ethylbenzene	ug/L	20	19.0	95	70-130	
Naphthalene	ug/L	20	16.5	83	55-160	
Toluene	ug/L	20	18.9	94	70-130	
Xylene (Total)	ug/L	60	56.1	93	70-130	
1,2-Dichloroethane-d4 (S)	%.			101	70-130	
4-Bromofluorobenzene (S)	%.			102	70-130	
Dibromofluoromethane (S)	%.			101	70-130	
Toluene-d8 (S)	%.			105	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2296616 2296617

Parameter	Units	30453173002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	1.6	20	20	20.2	20.9	93	96	50-149	3	30	
Ethylbenzene	ug/L	1.0 U	20	20	16.0	18.1	79	90	63-135	12	30	
Naphthalene	ug/L	5.4	20	20	21.9	24.2	83	94	30-157	10	30	
Toluene	ug/L	1.2	20	20	18.0	19.5	84	91	59-139	8	30	
Xylene (Total)	ug/L	1.5J	60	60	48.7	55.0	79	89	63-135	12	30	
1,2-Dichloroethane-d4 (S)	%.						95	94	70-130			
4-Bromofluorobenzene (S)	%.						107	106	70-130			
Dibromofluoromethane (S)	%.						100	100	70-130			
Toluene-d8 (S)	%.						102	104	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30453173

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30453173

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30453173001	**Trip Blank Wt 1**	EPA 8260B	475435		
30453173002	**CO55-PZM000**	EPA 8260B	475435		
30453173003	**CO24-PZM007**	EPA 8260B	475435		
30453173004	**CO23-PZM008**	EPA 8260B	475435		
30453173005	**CO60-PZP001**	EPA 8260B	475435		
30453173006	**CO26-PZM007**	EPA 8260B	475435		
30453173007	**CO58-PZM001**	EPA 8260B	475435		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Reque

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

WO# : 30453173

30453173

Section A Required Client Information:

Company:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd
	Sparrows Point, MD 21219
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B Required Project Information:

Report To:	Matt Newman
Copy To:	Stew Kabis
PO Number:	
Project Name:	COA
Project Number:	20010210

Section C Invoice Information:

Attention:	Matt Newman
Company Name:	Tradepoint Atlantic
Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
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

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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	—		12/2/21		—		2				2						x		001
2	C055-PZM000	WT	G				850		3				3						x		002
3	C024-PZM007	WT	G				945		3				3						x		003
4	C023-PZM008	WT	G				1100		3				3						x		004
5	C060-PZP001	WT	G				1210		3				3						x		005
6	C026-PZM007	WT	G				1350		3				3						x		006
7	C058-PZM001	WT	G				1445		3				3						x		007
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No		12/2/21	1605		12-2	20
Data Validation Required? (Y/N): No		12/2/21	2014	ROS PACE	12-2-21	2200
If data package is required, attach data package checklist.	ROS PACE	12-2-21	2215	Marvin Thomas	12-2-2021	2215

Sample Conditions: Received on Ice (Y/N): Y | Custody Sealed Cooler (Y/N): N | Samples Intact (Y/N): Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 12/2/21

*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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Trackpoint Atlantic Project # #30453173#

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.6 °C Correction Factor: -.1 °C Final Temp: 2.5 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MLL 12/3/2021
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: N/A	✓			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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed MLL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

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 10, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30453825

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on December 07, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Megan Smetanka

Megan J. Smetanka
megan.smetanka@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Kaye Guille, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30453825

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30453825

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30453825001	**Trip Blank Wt 1**	Water	12/07/21 00:01	12/07/21 23:15
30453825002	**CO57-PZP002**	Water	12/07/21 13:15	12/07/21 23:15
30453825003	**CO59-PZP002**	Water	12/07/21 14:50	12/07/21 23:15

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30453825

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30453825001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30453825002	**CO57-PZP002**	EPA 8260B	LEL	9	PASI-PA
30453825003	**CO59-PZP002**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30453825

Sample: Trip Blank Wt 1 **Lab ID: 30453825001** Collected: 12/07/21 00:01 Received: 12/07/21 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		12/09/21 15:43	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/09/21 15:43	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		12/09/21 15:43	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		12/09/21 15:43	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		12/09/21 15:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		1		12/09/21 15:43	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	70-130		1		12/09/21 15:43	17060-07-0	
Toluene-d8 (S)	104	%.	70-130		1		12/09/21 15:43	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		12/09/21 15:43	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30453825

Sample: CO57-PZP002 **Lab ID: 30453825002** Collected: 12/07/21 13:15 Received: 12/07/21 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		12/09/21 19:57	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/09/21 19:57	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		12/09/21 19:57	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		12/09/21 19:57	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		12/09/21 19:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	70-130		1		12/09/21 19:57	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%.	70-130		1		12/09/21 19:57	17060-07-0	
Toluene-d8 (S)	104	%.	70-130		1		12/09/21 19:57	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		1		12/09/21 19:57	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30453825

Sample: CO59-PZP002 **Lab ID: 30453825003** Collected: 12/07/21 14:50 Received: 12/07/21 23:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**231**	ug/L	1.0	0.34	1		12/09/21 20:23	71-43-2	
Ethylbenzene	**11.0**	ug/L	1.0	0.40	1		12/09/21 20:23	100-41-4	
Naphthalene	**852**	ug/L	10.0	4.1	5		12/10/21 13:28	91-20-3	
Toluene	**80.1**	ug/L	1.0	0.32	1		12/09/21 20:23	108-88-3	
Xylene (Total)	**173**	ug/L	3.0	1.4	1		12/09/21 20:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		12/09/21 20:23	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%.	70-130		1		12/09/21 20:23	17060-07-0	
Toluene-d8 (S)	103	%.	70-130		1		12/09/21 20:23	2037-26-5	
Dibromofluoromethane (S)	99	%.	70-130		1		12/09/21 20:23	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30453825

QC Batch: 475624 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30453825001, 30453825002, 30453825003

METHOD BLANK: 2297483 Matrix: Water
Associated Lab Samples: 30453825001, 30453825002, 30453825003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	12/09/21 13:36	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	12/09/21 13:36	
Naphthalene	ug/L	2.0 U	2.0	0.82	12/09/21 13:36	
Toluene	ug/L	1.0 U	1.0	0.32	12/09/21 13:36	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	12/09/21 13:36	
1,2-Dichloroethane-d4 (S)	%.	97	70-130		12/09/21 13:36	
4-Bromofluorobenzene (S)	%.	107	70-130		12/09/21 13:36	
Dibromofluoromethane (S)	%.	100	70-130		12/09/21 13:36	
Toluene-d8 (S)	%.	104	70-130		12/09/21 13:36	

LABORATORY CONTROL SAMPLE: 2297484

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.2	96	70-130	
Ethylbenzene	ug/L	20	20.0	100	70-130	
Naphthalene	ug/L	20	18.5	92	55-160	
Toluene	ug/L	20	20.0	100	70-130	
Xylene (Total)	ug/L	60	59.7	100	70-130	
1,2-Dichloroethane-d4 (S)	%.			95	70-130	
4-Bromofluorobenzene (S)	%.			106	70-130	
Dibromofluoromethane (S)	%.			99	70-130	
Toluene-d8 (S)	%.			107	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2297485 2297486

Parameter	Units	30453914001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	19.3	16.6	92	78	50-149	15	30	
Ethylbenzene	ug/L	ND	20	20	18.4	17.0	92	85	63-135	8	30	
Naphthalene	ug/L	4.8	20	20	16.9	16.9	60	60	30-157	0	30	
Toluene	ug/L	ND	20	20	18.2	16.6	87	79	59-139	9	30	
Xylene (Total)	ug/L	ND	60	60	54.5	49.1	89	81	63-135	10	30	
1,2-Dichloroethane-d4 (S)	%.						101	96	70-130			
4-Bromofluorobenzene (S)	%.						103	104	70-130			
Dibromofluoromethane (S)	%.						99	100	70-130			
Toluene-d8 (S)	%.						98	105	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30453825

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30453825

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30453825001	**Trip Blank Wt 1**	EPA 8260B	475624		
30453825002	**CO57-PZP002**	EPA 8260B	475624		
30453825003	**CO59-PZP002**	EPA 8260B	475624		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request D

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

WO# : 30453825

30453825

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Requested Analysis Filtered (Y/N)

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

ITEM #	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	$Na_2S_2O_3$	Other	DI Water	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	Wt	-		12/7/21	—		2				2					X		001
2	C057-PZP002	WTG				1315		3				3					X		002
3	C059-PZP002	WTG				1450		3				3					X		003
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions
Data Package Required? (Y/N): No		12/7/21	15:42	Jason Chandler	12/7/21	15:42	
Data Validation Required? (Y/N): No		12/7/21	20:20	URDS Page	12-7-21	2020	Y
If data package is required, attach data package envelope	URDS Page	12-7-21	2345	Marvin J Long	12-7-2021	7315	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perna

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12/7/21

Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Atlantic Project # #30453825#

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.0 °C Correction Factor: -.5 °C Final Temp: .5 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A / Date and initials of person examining contents:
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:				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 sample field filtered				13.
Organic Samples checked for dechlorination:				14.
Filtered volume received for Dissolved tests				15.
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed MLL / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: / Date: / Survey Meter SN:

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 16, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30454068

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on December 08, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Megan Smetanka

Megan J. Smetanka
megan.smetanka@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Kaye Guille, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30454068

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30454068

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30454068001	**Trip Blank Wt 1**	Water	12/08/21 00:01	12/08/21 21:50
30454068002	**CO194-MWS**	Water	12/08/21 09:15	12/08/21 21:50
30454068003	**CO196-MWS**	Water	12/08/21 10:30	12/08/21 21:50
30454068004	**CO201-MWS**	Water	12/08/21 11:20	12/08/21 21:50
30454068005	**CO30-PZM015**	Water	12/08/21 12:30	12/08/21 21:50
30454068006	**CO198-MWS**	Water	12/08/21 13:45	12/08/21 21:50
30454068007	**CO195-MWS**	Water	12/08/21 14:50	12/08/21 21:50

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30454068

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30454068001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30454068002	**CO194-MWS**	EPA 8260B	LEL	9	PASI-PA
30454068003	**CO196-MWS**	EPA 8260B	LEL	9	PASI-PA
30454068004	**CO201-MWS**	EPA 8260B	LEL	9	PASI-PA
30454068005	**CO30-PZM015**	EPA 8260B	LEL	9	PASI-PA
30454068006	**CO198-MWS**	EPA 8260B	LEL	9	PASI-PA
30454068007	**CO195-MWS**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454068

Sample: Trip Blank Wt 1 **Lab ID: 30454068001** Collected: 12/08/21 00:01 Received: 12/08/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		12/11/21 13:31	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/11/21 13:31	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		12/11/21 13:31	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		12/11/21 13:31	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		12/11/21 13:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	70-130		1		12/11/21 13:31	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%.	70-130		1		12/11/21 13:31	17060-07-0	
Toluene-d8 (S)	113	%.	70-130		1		12/11/21 13:31	2037-26-5	
Dibromofluoromethane (S)	101	%.	70-130		1		12/11/21 13:31	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454068

Sample: CO194-MWS **Lab ID: 30454068002** Collected: 12/08/21 09:15 Received: 12/08/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**944**	ug/L	5.0	1.7	5		12/11/21 16:03	71-43-2	
Ethylbenzene	**5.0J**	ug/L	5.0	2.0	5		12/11/21 16:03	100-41-4	
Naphthalene	**3260**	ug/L	200	81.9	100		12/11/21 16:28	91-20-3	
Toluene	**144**	ug/L	5.0	1.6	5		12/11/21 16:03	108-88-3	
Xylene (Total)	**73.9**	ug/L	15.0	6.8	5		12/11/21 16:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	70-130		5		12/11/21 16:03	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%.	70-130		5		12/11/21 16:03	17060-07-0	
Toluene-d8 (S)	109	%.	70-130		5		12/11/21 16:03	2037-26-5	
Dibromofluoromethane (S)	101	%.	70-130		5		12/11/21 16:03	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454068

Sample: CO196-MWS **Lab ID: 30454068003** Collected: 12/08/21 10:30 Received: 12/08/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**16500**	ug/L	100	33.8	100		12/11/21 17:19	71-43-2	
Ethylbenzene	**21.8**	ug/L	5.0	2.0	5		12/11/21 16:54	100-41-4	
Naphthalene	**969**	ug/L	10.0	4.1	5		12/11/21 16:54	91-20-3	
Toluene	**1080**	ug/L	5.0	1.6	5		12/11/21 16:54	108-88-3	
Xylene (Total)	**240**	ug/L	15.0	6.8	5		12/11/21 16:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	108	%.	70-130		5		12/11/21 16:54	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%.	70-130		5		12/11/21 16:54	17060-07-0	
Toluene-d8 (S)	110	%.	70-130		5		12/11/21 16:54	2037-26-5	
Dibromofluoromethane (S)	96	%.	70-130		5		12/11/21 16:54	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454068

Sample: CO201-MWS **Lab ID: 30454068004** Collected: 12/08/21 11:20 Received: 12/08/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**13900**	ug/L	100	33.8	100		12/13/21 18:30	71-43-2	
Ethylbenzene	**19.7**	ug/L	1.0	0.40	1		12/11/21 14:22	100-41-4	
Naphthalene	**702**	ug/L	20.0	8.2	10		12/11/21 14:47	91-20-3	
Toluene	**904**	ug/L	10.0	3.2	10		12/11/21 14:47	108-88-3	
Xylene (Total)	**245**	ug/L	3.0	1.4	1		12/11/21 14:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		1		12/11/21 14:22	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%.	70-130		1		12/11/21 14:22	17060-07-0	
Toluene-d8 (S)	113	%.	70-130		1		12/11/21 14:22	2037-26-5	
Dibromofluoromethane (S)	90	%.	70-130		1		12/11/21 14:22	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454068

Sample: CO30-PZM015 **Lab ID: 30454068005** Collected: 12/08/21 12:30 Received: 12/08/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**57000**	ug/L	500	169	500		12/13/21 18:55	71-43-2	
Ethylbenzene	**94.6**	ug/L	5.0	2.0	5		12/11/21 15:12	100-41-4	
Naphthalene	**2300**	ug/L	100	41.0	50		12/11/21 15:38	91-20-3	
Toluene	**4650**	ug/L	50.0	15.8	50		12/11/21 15:38	108-88-3	
Xylene (Total)	**1380**	ug/L	15.0	6.8	5		12/11/21 15:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		5		12/11/21 15:12	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%.	70-130		5		12/11/21 15:12	17060-07-0	
Toluene-d8 (S)	110	%.	70-130		5		12/11/21 15:12	2037-26-5	
Dibromofluoromethane (S)	91	%.	70-130		5		12/11/21 15:12	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454068

Sample: CO198-MWS **Lab ID: 30454068006** Collected: 12/08/21 13:45 Received: 12/08/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**697**	ug/L	5.0	1.7	5		12/11/21 18:34	71-43-2	
Ethylbenzene	**5.7**	ug/L	5.0	2.0	5		12/11/21 18:34	100-41-4	
Naphthalene	**3490**	ug/L	200	81.9	100		12/11/21 19:00	91-20-3	
Toluene	**129**	ug/L	5.0	1.6	5		12/11/21 18:34	108-88-3	
Xylene (Total)	**66.1**	ug/L	15.0	6.8	5		12/11/21 18:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		5		12/11/21 18:34	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%.	70-130		5		12/11/21 18:34	17060-07-0	
Toluene-d8 (S)	112	%.	70-130		5		12/11/21 18:34	2037-26-5	
Dibromofluoromethane (S)	101	%.	70-130		5		12/11/21 18:34	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454068

Sample: CO195-MWS **Lab ID: 30454068007** Collected: 12/08/21 14:50 Received: 12/08/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**59000**	ug/L	200	67.6	200		12/11/21 19:50	71-43-2	
Ethylbenzene	**82.3**	ug/L	5.0	2.0	5		12/11/21 19:25	100-41-4	
Naphthalene	**2400**	ug/L	400	164	200		12/11/21 19:50	91-20-3	
Toluene	**4340**	ug/L	200	63.4	200		12/11/21 19:50	108-88-3	
Xylene (Total)	**1160**	ug/L	15.0	6.8	5		12/11/21 19:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		5		12/11/21 19:25	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%.	70-130		5		12/11/21 19:25	17060-07-0	
Toluene-d8 (S)	110	%.	70-130		5		12/11/21 19:25	2037-26-5	
Dibromofluoromethane (S)	91	%.	70-130		5		12/11/21 19:25	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30454068

QC Batch: 475955 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30454068001, 30454068002, 30454068003, 30454068004, 30454068005, 30454068006, 30454068007

METHOD BLANK: 2299098 Matrix: Water
Associated Lab Samples: 30454068001, 30454068002, 30454068003, 30454068004, 30454068005, 30454068006, 30454068007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	12/11/21 13:06	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	12/11/21 13:06	
Naphthalene	ug/L	2.0 U	2.0	0.82	12/11/21 13:06	
Toluene	ug/L	1.0 U	1.0	0.32	12/11/21 13:06	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	12/11/21 13:06	
1,2-Dichloroethane-d4 (S)	%.	117	70-130		12/11/21 13:06	
4-Bromofluorobenzene (S)	%.	105	70-130		12/11/21 13:06	
Dibromofluoromethane (S)	%.	104	70-130		12/11/21 13:06	
Toluene-d8 (S)	%.	112	70-130		12/11/21 13:06	

LABORATORY CONTROL SAMPLE: 2299099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	23.1	115	70-130	
Ethylbenzene	ug/L	20	22.6	113	70-130	
Naphthalene	ug/L	20	18.6	93	55-160	
Toluene	ug/L	20	23.8	119	70-130	
Xylene (Total)	ug/L	60	66.7	111	70-130	
1,2-Dichloroethane-d4 (S)	%.			118	70-130	
4-Bromofluorobenzene (S)	%.			104	70-130	
Dibromofluoromethane (S)	%.			100	70-130	
Toluene-d8 (S)	%.			113	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2299100 2299101

Parameter	Units	30454323004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	16.9	20	20	36.9	34.0	100	85	50-149	8	30	
Ethylbenzene	ug/L	1.0 U	20	20	19.1	16.4	95	82	63-135	15	30	
Naphthalene	ug/L	2.0 U	20	20	16.2	14.1	81	70	30-157	14	30	
Toluene	ug/L	0.41J	20	20	20.1	17.5	99	85	59-139	14	30	
Xylene (Total)	ug/L	3.0 U	60	60	55.2	49.3	92	82	63-135	11	30	
1,2-Dichloroethane-d4 (S)	%.						110	109	70-130			
4-Bromofluorobenzene (S)	%.						98	97	70-130			
Dibromofluoromethane (S)	%.						98	99	70-130			
Toluene-d8 (S)	%.						110	112	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30454068

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30454068

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30454068001	**Trip Blank Wt 1**	EPA 8260B	475955		
30454068002	**CO194-MWS**	EPA 8260B	475955		
30454068003	**CO196-MWS**	EPA 8260B	475955		
30454068004	**CO201-MWS**	EPA 8260B	475955		
30454068005	**CO30-PZM015**	EPA 8260B	475955		
30454068006	**CO198-MWS**	EPA 8260B	475955		
30454068007	**CO195-MWS**	EPA 8260B	475955		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 30454068

30454068

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd. Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Requested Analysis Filtered (Y/N)

ITEM #	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	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	$Na_2S_2O_3$	Other	DI Water	Y/N	Analysis Test → BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1		Wt	—		12/8/21		—		2				2							
2	C0194-MWS		WTG					915		3				3						X	001
3	C0196-MWS		WTG					1030		3				3						X	002
4	C0201-MWS		WTG					1120		3				3						X	003
5	C030-PZM015		WTG					1230		3				3						X	004
6	C0198-MWS		WTG					1345		3				3						X	005
7	C0195-MWS		WTG					1450		3				3						X	006
8																				X	007
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions		
Data Package Required? (Y/N): No		12-8-21	1500		12-8	15:30			
Data Validation Required? (Y/N): No		12-8-21	18:00	RDS PACE	12-8-21	1800	Y		
If data package is required attach data package checklist	RDS PACE	12-8-21	2150	Marissa L Way	12-8-2021	2150	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12-8-21

Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Page 15 of 16

F-ALL-Q-020rev.06, 2-Feb-2007

Pittsburgh Lab Sample Condition Upon Receipt

#30454068#

Pace Analytical

Client Name: Tradepoint Atlantic Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLL

Tracking #: N/A

LIMS Login MLL

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.2 °C Correction Factor: -.4 °C Final Temp: 2.8 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A	Date and Initials of person examining contents: MLL 12/9/2021
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 sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.	
All containers meet method preservation requirements.	✓			Initial when completed MLL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed:	Date: Survey Meter SN:

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 17, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30454323

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on December 09, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Megan Smetanka

Megan J. Smetanka
megan.smetanka@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Kaye Guille, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30454323

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30454323

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30454323001	**Trip Blank Wt 1**	Water	12/09/21 00:01	12/09/21 22:00
30454323002	**CO93-PZM**	Water	12/09/21 09:25	12/09/21 22:00
30454323003	**CO190-MWS**	Water	12/09/21 10:40	12/09/21 22:00
30454323004	**GD01-MWI**	Water	12/09/21 13:30	12/09/21 22:00
30454323005	**GD02-MWI**	Water	12/09/21 14:55	12/09/21 22:00

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30454323

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30454323001	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA
30454323002	**CO93-PZM**	EPA 8260B	LEL	9	PASI-PA
30454323003	**CO190-MWS**	EPA 8260B	LEL	9	PASI-PA
30454323004	**GD01-MWI**	EPA 8260B	LEL	9	PASI-PA
30454323005	**GD02-MWI**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454323

Sample: Trip Blank Wt 1 **Lab ID: 30454323001** Collected: 12/09/21 00:01 Received: 12/09/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		12/13/21 13:52	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/13/21 13:52	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		12/13/21 13:52	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		12/13/21 13:52	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		12/13/21 13:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	70-130		1		12/13/21 13:52	460-00-4	
1,2-Dichloroethane-d4 (S)	120	%.	70-130		1		12/13/21 13:52	17060-07-0	
Toluene-d8 (S)	109	%.	70-130		1		12/13/21 13:52	2037-26-5	
Dibromofluoromethane (S)	104	%.	70-130		1		12/13/21 13:52	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454323

Sample: CO93-PZM **Lab ID: 30454323002** Collected: 12/09/21 09:25 Received: 12/09/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**182000**	ug/L	1000	338	1000		12/11/21 20:40	71-43-2	
Ethylbenzene	**1410**	ug/L	5.0	2.0	5		12/11/21 20:15	100-41-4	
Naphthalene	**7200**	ug/L	2000	819	1000		12/11/21 20:40	91-20-3	
Toluene	**59800**	ug/L	1000	317	1000		12/11/21 20:40	108-88-3	
Xylene (Total)	**15100**	ug/L	3000	1350	1000		12/11/21 20:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		5		12/11/21 20:15	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%.	70-130		5		12/11/21 20:15	17060-07-0	
Toluene-d8 (S)	109	%.	70-130		5		12/11/21 20:15	2037-26-5	
Dibromofluoromethane (S)	86	%.	70-130		5		12/11/21 20:15	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454323

Sample: CO190-MWS **Lab ID: 30454323003** Collected: 12/09/21 10:40 Received: 12/09/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**299000**	ug/L	1000	338	1000		12/11/21 21:30	71-43-2	
Ethylbenzene	**21.1**	ug/L	5.0	2.0	5		12/11/21 21:05	100-41-4	
Naphthalene	**98.1**	ug/L	10.0	4.1	5		12/11/21 21:05	91-20-3	
Toluene	**15900**	ug/L	1000	317	1000		12/11/21 21:30	108-88-3	
Xylene (Total)	**503**	ug/L	15.0	6.8	5		12/11/21 21:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	108	%.	70-130		5		12/11/21 21:05	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%.	70-130		5		12/11/21 21:05	17060-07-0	
Toluene-d8 (S)	111	%.	70-130		5		12/11/21 21:05	2037-26-5	
Dibromofluoromethane (S)	84	%.	70-130		5		12/11/21 21:05	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454323

Sample: GD01-MWI **Lab ID: 30454323004** Collected: 12/09/21 13:30 Received: 12/09/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**16.9**	ug/L	1.0	0.34	1		12/11/21 13:57	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/11/21 13:57	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		12/11/21 13:57	91-20-3	
Toluene	**0.41J**	ug/L	1.0	0.32	1		12/11/21 13:57	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		12/11/21 13:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	70-130		1		12/11/21 13:57	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%.	70-130		1		12/11/21 13:57	17060-07-0	
Toluene-d8 (S)	110	%.	70-130		1		12/11/21 13:57	2037-26-5	
Dibromofluoromethane (S)	101	%.	70-130		1		12/11/21 13:57	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454323

Sample: GD02-MWI **Lab ID: 30454323005** Collected: 12/09/21 14:55 Received: 12/09/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**127000**	ug/L	500	169	500		12/13/21 21:01	71-43-2	
Ethylbenzene	**546**	ug/L	5.0	2.0	5		12/13/21 20:11	100-41-4	
Naphthalene	**1910**	ug/L	100	41.0	50		12/13/21 20:36	91-20-3	
Toluene	**339**	ug/L	5.0	1.6	5		12/13/21 20:11	108-88-3	
Xylene (Total)	**327**	ug/L	15.0	6.8	5		12/13/21 20:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		5		12/13/21 20:11	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%.	70-130		5		12/13/21 20:11	17060-07-0	
Toluene-d8 (S)	114	%.	70-130		5		12/13/21 20:11	2037-26-5	
Dibromofluoromethane (S)	90	%.	70-130		5		12/13/21 20:11	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30454323

QC Batch: 475955
QC Batch Method: EPA 8260B
Analysis Method: EPA 8260B
Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30454323002, 30454323003, 30454323004

METHOD BLANK: 2299098 Matrix: Water
Associated Lab Samples: 30454323002, 30454323003, 30454323004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	12/11/21 13:06	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	12/11/21 13:06	
Naphthalene	ug/L	2.0 U	2.0	0.82	12/11/21 13:06	
Toluene	ug/L	1.0 U	1.0	0.32	12/11/21 13:06	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	12/11/21 13:06	
1,2-Dichloroethane-d4 (S)	%.	117	70-130		12/11/21 13:06	
4-Bromofluorobenzene (S)	%.	105	70-130		12/11/21 13:06	
Dibromofluoromethane (S)	%.	104	70-130		12/11/21 13:06	
Toluene-d8 (S)	%.	112	70-130		12/11/21 13:06	

LABORATORY CONTROL SAMPLE: 2299099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	23.1	115	70-130	
Ethylbenzene	ug/L	20	22.6	113	70-130	
Naphthalene	ug/L	20	18.6	93	55-160	
Toluene	ug/L	20	23.8	119	70-130	
Xylene (Total)	ug/L	60	66.7	111	70-130	
1,2-Dichloroethane-d4 (S)	%.			118	70-130	
4-Bromofluorobenzene (S)	%.			104	70-130	
Dibromofluoromethane (S)	%.			100	70-130	
Toluene-d8 (S)	%.			113	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2299100 2299101

Parameter	Units	30454323004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	16.9	20	20	36.9	34.0	100	85	50-149	8	30	
Ethylbenzene	ug/L	1.0 U	20	20	19.1	16.4	95	82	63-135	15	30	
Naphthalene	ug/L	2.0 U	20	20	16.2	14.1	81	70	30-157	14	30	
Toluene	ug/L	0.41J	20	20	20.1	17.5	99	85	59-139	14	30	
Xylene (Total)	ug/L	3.0 U	60	60	55.2	49.3	92	82	63-135	11	30	
1,2-Dichloroethane-d4 (S)	%.						110	109	70-130			
4-Bromofluorobenzene (S)	%.						98	97	70-130			
Dibromofluoromethane (S)	%.						98	99	70-130			
Toluene-d8 (S)	%.						110	112	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30454323

QC Batch: 476059
QC Batch Method: EPA 8260B
Analysis Method: EPA 8260B
Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30454323001, 30454323005

METHOD BLANK: 2299433 Matrix: Water
Associated Lab Samples: 30454323001, 30454323005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	12/13/21 12:36	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	12/13/21 12:36	
Naphthalene	ug/L	2.0 U	2.0	0.82	12/13/21 12:36	
Toluene	ug/L	1.0 U	1.0	0.32	12/13/21 12:36	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	12/13/21 12:36	
1,2-Dichloroethane-d4 (S)	%.	120	70-130		12/13/21 12:36	
4-Bromofluorobenzene (S)	%.	106	70-130		12/13/21 12:36	
Dibromofluoromethane (S)	%.	105	70-130		12/13/21 12:36	
Toluene-d8 (S)	%.	106	70-130		12/13/21 12:36	

LABORATORY CONTROL SAMPLE: 2299434

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	25.3	126	70-130	
Ethylbenzene	ug/L	20	24.3	122	70-130	
Naphthalene	ug/L	20	19.2	96	55-160	
Toluene	ug/L	20	24.9	124	70-130	
Xylene (Total)	ug/L	60	73.3	122	70-130	
1,2-Dichloroethane-d4 (S)	%.			115	70-130	
4-Bromofluorobenzene (S)	%.			101	70-130	
Dibromofluoromethane (S)	%.			99	70-130	
Toluene-d8 (S)	%.			110	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2299435 2299436

Parameter	Units	30453683001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	0.0010 U mg/L	20	20	17.2	15.4	86	77	50-149	11	30	
Ethylbenzene	ug/L	0.0010 U mg/L	20	20	16.6	14.5	83	72	63-135	14	30	
Naphthalene	ug/L	0.0020 U mg/L	20	20	14.0	13.4	70	67	30-157	4	30	
Toluene	ug/L	0.0010 U mg/L	20	20	17.4	14.8	86	74	59-139	16	30	
Xylene (Total)	ug/L	0.0030 U mg/L	60	60	49.4	41.5	82	69	63-135	17	30	
1,2-Dichloroethane-d4 (S)	%.						116	113	70-130			
4-Bromofluorobenzene (S)	%.						101	102	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30454323

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2299435 2299436

Parameter	Units	30453683001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						98	101	70-130			
Toluene-d8 (S)	%.						113	109	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30454323

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30454323

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30454323001	**Trip Blank Wt 1**	EPA 8260B	476059		
30454323002	**CO93-PZM**	EPA 8260B	475955		
30454323003	**CO190-MWS**	EPA 8260B	475955		
30454323004	**GD01-MWI**	EPA 8260B	475955		
30454323005	**GD02-MWI**	EPA 8260B	476059		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request

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

WO# : 30454323

30454323

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	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	$Na_2S_2O_3$	Other	DI Water	Y/N #	Analysis Test: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
1	Trip Blank Wt 1	Wt	-		12/9/21		—		2				2						X			001
2	C093-PZM	WT	G				925		3				3						X			002
3	C0190-MWS	WT	G				1040		3				3						X			003
4	GD01-MWI	WT	G				1330		3				3						X			004
5	GD02-MWF	WT	G				1455		3				3						X			005
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Conditions		
Data Package Required? (Y/N): No		12/9/21	1530		12-9-21	15:45			
Data Validation Required? (Y/N): No		12/9/21	19:00	RDS FACE	12-9-21	1905	Y		
If data package is required, attach data package shipment	RDS FACE	12821	2200	Manuel Chan	12-9-2021	2200	Y	N	Y
							Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perron

SIGNATURE of SAMPLER: Lisa Perron

DATE Signed (MM/DD/YY): 12/9/21

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.

3454 30454323

Pittsburgh Lab Sample Condition Upon Receipt

#30454323

Pace Analytical

Client Name: Trackpoint Atlantic Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label mlc
LIMS Login mlc

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.4 °C Correction Factor: -.4 °C Final Temp: 1.0 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# N/A / Date and Initials of person examining contents: mlc 12/9/2021
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: W	✓			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 sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		✓		16.
All containers meet method preservation requirements.	✓			Initial when completed: mlc Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

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 21, 2021

Mr. Bob Tworkowski
Tradepoint Atlantic
1600 Sparrow's Point Boulevard
Sparrows Point, MD 21219

RE: Project: COA
Pace Project No.: 30454888

Dear Mr. Tworkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on December 13, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Megan Smetanka

Megan J. Smetanka
megan.smetanka@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Kaye Guille, ARM Group Inc.
J.Price, ARM Group Inc.
Stewart Kabis, ARM Group Inc.
Mr. Eric S. Magdar, ARM Group Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: COA
Pace Project No.: 30454888

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: COA
Pace Project No.: 30454888

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30454888001	**C071-PZM006**	Water	12/13/21 09:10	12/13/21 22:00
30454888002	**C070-PZM005**	Water	12/13/21 09:50	12/13/21 22:00
30454888003	**C069-PZM005**	Water	12/13/21 10:20	12/13/21 22:00
30454888004	**C068-PZM005**	Water	12/13/21 11:00	12/13/21 22:00
30454888005	**C067-PZM006**	Water	12/13/21 11:30	12/13/21 22:00
30454888006	**C066-PZM005**	Water	12/13/21 12:10	12/13/21 22:00
30454888007	**C063-PZM007**	Water	12/13/21 14:00	12/13/21 22:00
30454888008	**C061-PZM007**	Water	12/13/21 14:55	12/13/21 22:00
30454888009	**Trip Blank Wt 1**	Water	12/13/21 00:00	12/13/21 22:00

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: COA
Pace Project No.: 30454888

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30454888001	**C071-PZM006**	EPA 8260B	LEL	9	PASI-PA
30454888002	**C070-PZM005**	EPA 8260B	LEL	9	PASI-PA
30454888003	**C069-PZM005**	EPA 8260B	LEL	9	PASI-PA
30454888004	**C068-PZM005**	EPA 8260B	LEL	9	PASI-PA
30454888005	**C067-PZM006**	EPA 8260B	LEL	9	PASI-PA
30454888006	**C066-PZM005**	EPA 8260B	LEL	9	PASI-PA
30454888007	**C063-PZM007**	EPA 8260B	LEL	9	PASI-PA
30454888008	**C061-PZM007**	EPA 8260B	LEL	9	PASI-PA
30454888009	**Trip Blank Wt 1**	EPA 8260B	LEL	9	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454888

Sample: C071-PZM006 **Lab ID: 30454888001** Collected: 12/13/21 09:10 Received: 12/13/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**65.1**	ug/L	1.0	0.34	1		12/20/21 20:16	71-43-2	
Ethylbenzene	**1.7**	ug/L	1.0	0.40	1		12/20/21 20:16	100-41-4	
Naphthalene	**140**	ug/L	2.0	0.82	1		12/20/21 20:16	91-20-3	
Toluene	**18.3**	ug/L	1.0	0.32	1		12/20/21 20:16	108-88-3	
Xylene (Total)	**30.7**	ug/L	3.0	1.4	1		12/20/21 20:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	113	%.	70-130		1		12/20/21 20:16	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%.	70-130		1		12/20/21 20:16	17060-07-0	
Toluene-d8 (S)	105	%.	70-130		1		12/20/21 20:16	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		12/20/21 20:16	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454888

Sample: C070-PZM005 **Lab ID: 30454888002** Collected: 12/13/21 09:50 Received: 12/13/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**46.2**	ug/L	1.0	0.34	1		12/18/21 02:53	71-43-2	
Ethylbenzene	**1.7**	ug/L	1.0	0.40	1		12/18/21 02:53	100-41-4	
Naphthalene	**243**	ug/L	2.0	0.82	1		12/18/21 02:53	91-20-3	
Toluene	**17.9**	ug/L	1.0	0.32	1		12/18/21 02:53	108-88-3	
Xylene (Total)	**28.6**	ug/L	3.0	1.4	1		12/18/21 02:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	70-130		1		12/18/21 02:53	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%.	70-130		1		12/18/21 02:53	17060-07-0	
Toluene-d8 (S)	109	%.	70-130		1		12/18/21 02:53	2037-26-5	
Dibromofluoromethane (S)	96	%.	70-130		1		12/18/21 02:53	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454888

Sample: C069-PZM005 **Lab ID: 30454888003** Collected: 12/13/21 10:20 Received: 12/13/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**314**	ug/L	1.0	0.34	1		12/18/21 01:13	71-43-2	
Ethylbenzene	**8.7**	ug/L	1.0	0.40	1		12/18/21 01:13	100-41-4	
Naphthalene	**1660**	ug/L	20.0	8.2	10		12/18/21 01:38	91-20-3	
Toluene	**122**	ug/L	1.0	0.32	1		12/18/21 01:13	108-88-3	
Xylene (Total)	**180**	ug/L	3.0	1.4	1		12/18/21 01:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		12/18/21 01:13	460-00-4	
1,2-Dichloroethane-d4 (S)	123	%.	70-130		1		12/18/21 01:13	17060-07-0	
Toluene-d8 (S)	105	%.	70-130		1		12/18/21 01:13	2037-26-5	
Dibromofluoromethane (S)	103	%.	70-130		1		12/18/21 01:13	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454888

Sample: C068-PZM005 **Lab ID: 30454888004** Collected: 12/13/21 11:00 Received: 12/13/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**312**	ug/L	1.0	0.34	1		12/18/21 03:43	71-43-2	
Ethylbenzene	**9.3**	ug/L	1.0	0.40	1		12/18/21 03:43	100-41-4	
Naphthalene	**2920**	ug/L	40.0	16.4	20		12/18/21 04:09	91-20-3	
Toluene	**137**	ug/L	1.0	0.32	1		12/18/21 03:43	108-88-3	
Xylene (Total)	**208**	ug/L	3.0	1.4	1		12/18/21 03:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		12/18/21 03:43	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%.	70-130		1		12/18/21 03:43	17060-07-0	
Toluene-d8 (S)	104	%.	70-130		1		12/18/21 03:43	2037-26-5	
Dibromofluoromethane (S)	102	%.	70-130		1		12/18/21 03:43	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454888

Sample: C067-PZM006 **Lab ID: 30454888005** Collected: 12/13/21 11:30 Received: 12/13/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**356**	ug/L	1.0	0.34	1		12/18/21 02:03	71-43-2	
Ethylbenzene	**11.6**	ug/L	1.0	0.40	1		12/18/21 02:03	100-41-4	
Naphthalene	**2670**	ug/L	20.0	8.2	10		12/18/21 02:28	91-20-3	
Toluene	**172**	ug/L	1.0	0.32	1		12/18/21 02:03	108-88-3	
Xylene (Total)	**246**	ug/L	3.0	1.4	1		12/18/21 02:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	70-130		1		12/18/21 02:03	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%.	70-130		1		12/18/21 02:03	17060-07-0	
Toluene-d8 (S)	106	%.	70-130		1		12/18/21 02:03	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		12/18/21 02:03	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454888

Sample: C066-PZM005 **Lab ID: 30454888006** Collected: 12/13/21 12:10 Received: 12/13/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**381**	ug/L	5.0	1.7	5		12/18/21 00:23	71-43-2	MH
Ethylbenzene	**12.7**	ug/L	5.0	2.0	5		12/18/21 00:23	100-41-4	
Naphthalene	**2240**	ug/L	100	41.0	50		12/20/21 20:03	91-20-3	
Toluene	**197**	ug/L	5.0	1.6	5		12/18/21 00:23	108-88-3	
Xylene (Total)	**266**	ug/L	15.0	6.8	5		12/18/21 00:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%.	70-130		5		12/18/21 00:23	460-00-4	
1,2-Dichloroethane-d4 (S)	122	%.	70-130		5		12/18/21 00:23	17060-07-0	
Toluene-d8 (S)	104	%.	70-130		5		12/18/21 00:23	2037-26-5	
Dibromofluoromethane (S)	103	%.	70-130		5		12/18/21 00:23	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454888

Sample: C063-PZM007 **Lab ID: 30454888007** Collected: 12/13/21 14:00 Received: 12/13/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**425**	ug/L	5.0	1.7	5		12/18/21 04:34	71-43-2	
Ethylbenzene	**16.8**	ug/L	5.0	2.0	5		12/18/21 04:34	100-41-4	
Naphthalene	**4180**	ug/L	100	41.0	50		12/18/21 04:59	91-20-3	
Toluene	**229**	ug/L	5.0	1.6	5		12/18/21 04:34	108-88-3	
Xylene (Total)	**317**	ug/L	15.0	6.8	5		12/18/21 04:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%.	70-130		5		12/18/21 04:34	460-00-4	
1,2-Dichloroethane-d4 (S)	120	%.	70-130		5		12/18/21 04:34	17060-07-0	
Toluene-d8 (S)	107	%.	70-130		5		12/18/21 04:34	2037-26-5	
Dibromofluoromethane (S)	102	%.	70-130		5		12/18/21 04:34	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454888

Sample: C061-PZM007 **Lab ID: 30454888008** Collected: 12/13/21 14:55 Received: 12/13/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**397**	ug/L	1.0	0.34	1		12/17/21 23:57	71-43-2	
Ethylbenzene	**16.1**	ug/L	1.0	0.40	1		12/17/21 23:57	100-41-4	
Naphthalene	**2200**	ug/L	40.0	16.4	20		12/20/21 19:38	91-20-3	
Toluene	**154**	ug/L	1.0	0.32	1		12/17/21 23:57	108-88-3	
Xylene (Total)	**270**	ug/L	3.0	1.4	1		12/17/21 23:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	70-130		1		12/17/21 23:57	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%.	70-130		1		12/17/21 23:57	17060-07-0	
Toluene-d8 (S)	106	%.	70-130		1		12/17/21 23:57	2037-26-5	
Dibromofluoromethane (S)	100	%.	70-130		1		12/17/21 23:57	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: COA
Pace Project No.: 30454888

Sample: Trip Blank Wt 1 **Lab ID: 30454888009** Collected: 12/13/21 00:00 Received: 12/13/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Pace Analytical Services - Greensburg								
Benzene	**1.0 U**	ug/L	1.0	0.34	1		12/17/21 23:32	71-43-2	
Ethylbenzene	**1.0 U**	ug/L	1.0	0.40	1		12/17/21 23:32	100-41-4	
Naphthalene	**2.0 U**	ug/L	2.0	0.82	1		12/17/21 23:32	91-20-3	
Toluene	**1.0 U**	ug/L	1.0	0.32	1		12/17/21 23:32	108-88-3	
Xylene (Total)	**3.0 U**	ug/L	3.0	1.4	1		12/17/21 23:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	70-130		1		12/17/21 23:32	460-00-4	
1,2-Dichloroethane-d4 (S)	121	%.	70-130		1		12/17/21 23:32	17060-07-0	
Toluene-d8 (S)	105	%.	70-130		1		12/17/21 23:32	2037-26-5	
Dibromofluoromethane (S)	108	%.	70-130		1		12/17/21 23:32	1868-53-7	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30454888

QC Batch: 476678 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30454888002, 30454888003, 30454888004, 30454888005, 30454888006, 30454888007, 30454888008, 30454888009

METHOD BLANK: 2302915 Matrix: Water
Associated Lab Samples: 30454888002, 30454888003, 30454888004, 30454888005, 30454888006, 30454888007, 30454888008, 30454888009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	12/17/21 23:07	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	12/17/21 23:07	
Naphthalene	ug/L	2.0 U	2.0	0.82	12/17/21 23:07	
Toluene	ug/L	1.0 U	1.0	0.32	12/17/21 23:07	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	12/17/21 23:07	
1,2-Dichloroethane-d4 (S)	%.	117	70-130		12/17/21 23:07	
4-Bromofluorobenzene (S)	%.	102	70-130		12/17/21 23:07	
Dibromofluoromethane (S)	%.	107	70-130		12/17/21 23:07	
Toluene-d8 (S)	%.	105	70-130		12/17/21 23:07	

LABORATORY CONTROL SAMPLE: 2302916

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.9	104	70-130	
Ethylbenzene	ug/L	20	19.8	99	70-130	
Naphthalene	ug/L	20	15.8	79	55-160	
Toluene	ug/L	20	21.2	106	70-130	
Xylene (Total)	ug/L	60	59.2	99	70-130	
1,2-Dichloroethane-d4 (S)	%.			116	70-130	
4-Bromofluorobenzene (S)	%.			99	70-130	
Dibromofluoromethane (S)	%.			98	70-130	
Toluene-d8 (S)	%.			111	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2302917 2302918

Parameter	Units	30454888006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	381	100	100	461	410	80	30	50-149	12	30	MH
Ethylbenzene	ug/L	12.7	100	100	122	99.8	109	87	63-135	20	30	
Naphthalene	ug/L	2240	100	100	2600	2470	366	230	30-157	5	30	E
Toluene	ug/L	197	100	100	307	268	110	70	59-139	14	30	
Xylene (Total)	ug/L	266	300	300	586	501	107	78	63-135	16	30	
1,2-Dichloroethane-d4 (S)	%.						116	118	70-130			
4-Bromofluorobenzene (S)	%.						104	107	70-130			
Dibromofluoromethane (S)	%.						99	104	70-130			
Toluene-d8 (S)	%.						109	109	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: COA
Pace Project No.: 30454888

QC Batch: 476826
QC Batch Method: EPA 8260B
Analysis Method: EPA 8260B
Analysis Description: 8260B MSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30454888001

METHOD BLANK: 2303638 Matrix: Water
Associated Lab Samples: 30454888001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	1.0 U	1.0	0.34	12/20/21 12:19	
Ethylbenzene	ug/L	1.0 U	1.0	0.40	12/20/21 12:19	
Naphthalene	ug/L	2.0 U	2.0	0.82	12/20/21 12:19	
Toluene	ug/L	1.0 U	1.0	0.32	12/20/21 12:19	
Xylene (Total)	ug/L	3.0 U	3.0	1.4	12/20/21 12:19	
1,2-Dichloroethane-d4 (S)	%.	116	70-130		12/20/21 12:19	
4-Bromofluorobenzene (S)	%.	111	70-130		12/20/21 12:19	
Dibromofluoromethane (S)	%.	103	70-130		12/20/21 12:19	
Toluene-d8 (S)	%.	104	70-130		12/20/21 12:19	

LABORATORY CONTROL SAMPLE: 2303639

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	24.2	121	70-130	
Ethylbenzene	ug/L	20	23.5	118	70-130	
Naphthalene	ug/L	20	19.2	96	55-160	
Toluene	ug/L	20	23.8	119	70-130	
Xylene (Total)	ug/L	60	69.9	117	70-130	
1,2-Dichloroethane-d4 (S)	%.			106	70-130	
4-Bromofluorobenzene (S)	%.			100	70-130	
Dibromofluoromethane (S)	%.			99	70-130	
Toluene-d8 (S)	%.			107	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2303640 2303641

Parameter	Units	30455428005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	16.8	18.4	84	92	50-149	9	30	
Ethylbenzene	ug/L	ND	20	20	16.3	17.0	82	85	63-135	4	30	
Naphthalene	ug/L	ND	20	20	12.7	12.8	63	64	30-157	1	30	
Toluene	ug/L	ND	20	20	16.6	18.2	83	91	59-139	9	30	
Xylene (Total)	ug/L	ND	60	60	47.2	50.7	79	84	63-135	7	30	
1,2-Dichloroethane-d4 (S)	%.						111	111	70-130			
4-Bromofluorobenzene (S)	%.						97	95	70-130			
Dibromofluoromethane (S)	%.						100	99	70-130			
Toluene-d8 (S)	%.						108	106	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: COA
Pace Project No.: 30454888

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: COA
Pace Project No.: 30454888

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30454888001	**C071-PZM006**	EPA 8260B	476826		
30454888002	**C070-PZM005**	EPA 8260B	476678		
30454888003	**C069-PZM005**	EPA 8260B	476678		
30454888004	**C068-PZM005**	EPA 8260B	476678		
30454888005	**C067-PZM006**	EPA 8260B	476678		
30454888006	**C066-PZM005**	EPA 8260B	476678		
30454888007	**C063-PZM007**	EPA 8260B	476678		
30454888008	**C061-PZM007**	EPA 8260B	476678		
30454888009	**Trip Blank Wt 1**	EPA 8260B	476678		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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.

WO# : 30454888

30454888

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Tradepoint Atlantic	Report To:	Matt Newman	Attention:	Matt Newman
Address:	1600 Sparrows Point Blvd	Copy To:	Stew Kabis	Company Name:	Tradepoint Atlantic
	Sparrows Point, MD 21219			Address:	1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Email To:		PO Number:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	COA	Pace Project Manager:	Samantha Bayura
Requested Due Date/TAT:	5 day	Project Number:	20010210	Pace Profile #:	

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MD

Requested Analysis Filtered (Y/N)

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER / WATER / WASTE WATER / PRODUCT / SOIL/SOLID / OIL / WIPE / AIR / OTHER / TISSUE

ITEM #	Section D Required Client Information — 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	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	$Na_2S_2O_3$	Other	DI Water	Analysis Test Y/N: BTEX and naphthalene via 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank Wt 1	WT	—				—		2				2					X		001
2	C071-PZM006	WT	G				910		3				3					X		002
3	C070-PZM005	WT	G				950		3				3					X		003
4	C069-PZM005	WT	G				1020		3				3					X		004
5	C068-PZM005	WT	G				1100		3				3					X		005
6	C067-PZM006	WT	G				1130		3				3					X		006
7	C066-PZM005	WT	G				1210		3				3					X		007
8	C063-PZM007	WT	G				1400		3				3					X		008
9	C061-PZM007	WT	G				1455		3				3					X		009
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Data Package Required? (Y/N): No		12/13/21	1600		12/13/21	
Data Validation Required? (Y/N): No		12/13/21		PACE	12/13/21	
If data package is required, attach data package checklist	PACE	12/8/21	2200		12/13/21	2200

Sample Conditions: Received on Ice (Y/N): Y | Custody Sealed Cooler (Y/N): N | Samples Intact (Y/N): Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lisa Perrin

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 12/13/21

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.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Tradepoint Project #

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

Label #

LIMS Login

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.6 °C Correction Factor: 0.4 °C Final Temp: 2.2 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot#	Date and initials of person examining contents:
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 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. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		X		16.	
All containers meet method preservation requirements.	X			Initial when completed: AR	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 Samples Screened < 0.5 mrem/hr			X	Initial when completed:	Date: Survey Meter SN:

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®

Pace Greensburg Lab -Sample Container Count

Client _____

Site _____

Profile Number 133609

Notes 3VG9H for all, 2VG9H for TB

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	
1																													
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unprserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosul
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass Na Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserve
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved		

Plastic / Misc.

GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250ml plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag

WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe

30454888

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

29 January 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 01/22/21 11:34.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 5 DPE INF		1012204-01	Vapor	01/22/21 07:10	01/22/21 11:34
CELL 3 SVE INF		1012204-02	Vapor	01/22/21 08:50	01/22/21 11:34
CELL 1 SVE INF		1012204-03	Vapor	01/22/21 09:15	01/22/21 11:34

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

CELL 5 DPE INF

1012204-01 (Vapor)
Sample Date: 01/22/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	01/22/21	01/22/21 14:24	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	01/22/21	01/22/21 14:24	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Benzene	**1.00**		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	01/22/21	01/22/21 14:24	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	01/22/21	01/22/21 14:24	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	01/22/21	01/22/21 14:24	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	01/22/21	01/22/21 14:24	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	01/22/21	01/22/21 14:24	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

CELL 5 DPE INF

1012204-01 (Vapor)
Sample Date: 01/22/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	01/22/21	01/22/21 14:24	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	01/22/21	01/22/21 14:24	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	01/22/21	01/22/21 14:24	AS
Naphthalene	**0.13**	J	ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Styrene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Toluene	**0.42**		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

CELL 5 DPE INF

1012204-01 (Vapor)
Sample Date: 01/22/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,2,4-Trimethylbenzene	**0.12**	J	ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
o-Xylene	**0.21**		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
m- & p-Xylenes	**0.65**		ug/L	0.20	0.10	0.1	01/22/21	01/22/21 14:24	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*			*01/22/21*	*01/22/21 14:24*	
Surrogate: Toluene-d8			*75-120*	*105 %*			*01/22/21*	*01/22/21 14:24*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*96 %*			*01/22/21*	*01/22/21 14:24*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

CELL 3 SVE INF

1012204-02RE1 (Vapor)
Sample Date: 01/22/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	2.00	2.00	0.2	01/22/21	01/22/21 16:21	AS
tert-Amyl alcohol (TAA)	ND		ug/L	4.00	4.00	0.2	01/22/21	01/22/21 16:21	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Benzene	**23.7**		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Bromobenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Bromochloromethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Bromodichloromethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Bromoform	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Bromomethane	ND		ug/L	1.00	1.00	0.2	01/22/21	01/22/21 16:21	AS
tert-Butanol (TBA)	ND		ug/L	3.00	3.00	0.2	01/22/21	01/22/21 16:21	AS
2-Butanone (MEK)	ND		ug/L	2.00	2.00	0.2	01/22/21	01/22/21 16:21	AS
n-Butylbenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
sec-Butylbenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
tert-Butylbenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Carbon disulfide	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Carbon tetrachloride	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Chlorobenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Chloroethane	ND		ug/L	1.00	1.00	0.2	01/22/21	01/22/21 16:21	AS
Chloroform	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Chloromethane	ND		ug/L	1.00	1.00	0.2	01/22/21	01/22/21 16:21	AS
2-Chlorotoluene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
4-Chlorotoluene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Dibromochloromethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Dibromomethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,2-Dichlorobenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,3-Dichlorobenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,4-Dichlorobenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Dichlorodifluoromethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,1-Dichloroethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,2-Dichloroethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

CELL 3 SVE INF

1012204-02RE1 (Vapor)
Sample Date: 01/22/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
cis-1,2-Dichloroethene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
trans-1,2-Dichloroethene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Dichlorofluoromethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,2-Dichloropropane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,3-Dichloropropane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
2,2-Dichloropropane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,1-Dichloropropene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
cis-1,3-Dichloropropene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
trans-1,3-Dichloropropene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Ethylbenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Hexachlorobutadiene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
2-Hexanone	ND		ug/L	2.00	2.00	0.2	01/22/21	01/22/21 16:21	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
4-Isopropyltoluene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
4-Methyl-2-pentanone	ND		ug/L	2.00	2.00	0.2	01/22/21	01/22/21 16:21	AS
Methylene chloride	ND		ug/L	2.00	2.00	0.2	01/22/21	01/22/21 16:21	AS
Naphthalene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
n-Propylbenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Styrene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Tetrachloroethene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Toluene	**1.78**		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,1,1-Trichloroethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,1,2-Trichloroethane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Trichloroethene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

CELL 3 SVE INF

1012204-02RE1 (Vapor)
Sample Date: 01/22/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Vinyl chloride	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
o-Xylene	ND		ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
m- & p-Xylenes	**0.25**	J	ug/L	0.40	0.20	0.2	01/22/21	01/22/21 16:21	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*124 %*			*01/22/21*	*01/22/21 16:21*	
Surrogate: Toluene-d8			*75-120*	*102 %*			*01/22/21*	*01/22/21 16:21*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*			*01/22/21*	*01/22/21 16:21*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

CELL 1 SVE INF

1012204-03RE1 (Vapor)
Sample Date: 01/22/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	10.0	10.0	1	01/22/21	01/22/21 16:44	AS
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	01/22/21	01/22/21 16:44	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Benzene	**98.2**		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Bromobenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Bromochloromethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Bromodichloromethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Bromoform	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Bromomethane	ND		ug/L	5.00	5.00	1	01/22/21	01/22/21 16:44	AS
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	01/22/21	01/22/21 16:44	AS
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	01/22/21	01/22/21 16:44	AS
n-Butylbenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
sec-Butylbenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
tert-Butylbenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Carbon disulfide	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Carbon tetrachloride	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Chlorobenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Chloroethane	ND		ug/L	5.00	5.00	1	01/22/21	01/22/21 16:44	AS
Chloroform	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Chloromethane	ND		ug/L	5.00	5.00	1	01/22/21	01/22/21 16:44	AS
2-Chlorotoluene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
4-Chlorotoluene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Dibromochloromethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,2-Dibromoethane (EDB)	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Dibromomethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,2-Dichlorobenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,3-Dichlorobenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,4-Dichlorobenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Dichlorodifluoromethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,1-Dichloroethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,2-Dichloroethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

CELL 1 SVE INF

1012204-03RE1 (Vapor)
Sample Date: 01/22/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
cis-1,2-Dichloroethene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
trans-1,2-Dichloroethene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Dichlorofluoromethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,2-Dichloropropane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,3-Dichloropropane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
2,2-Dichloropropane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,1-Dichloropropene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
cis-1,3-Dichloropropene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
trans-1,3-Dichloropropene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Diisopropyl ether (DIPE)	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Ethylbenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Hexachlorobutadiene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
2-Hexanone	ND		ug/L	10.0	10.0	1	01/22/21	01/22/21 16:44	AS
Isopropylbenzene (Cumene)	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
4-Isopropyltoluene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	01/22/21	01/22/21 16:44	AS
Methylene chloride	ND		ug/L	10.0	10.0	1	01/22/21	01/22/21 16:44	AS
Naphthalene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
n-Propylbenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Styrene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Tetrachloroethene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Toluene	**1.69**	J	ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,2,3-Trichlorobenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,2,4-Trichlorobenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,1,1-Trichloroethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,1,2-Trichloroethane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Trichloroethene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

CELL 1 SVE INF

1012204-03RE1 (Vapor)
Sample Date: 01/22/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,2,4-Trimethylbenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
1,3,5-Trimethylbenzene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Vinyl chloride	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
o-Xylene	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
m- & p-Xylenes	ND		ug/L	2.00	1.00	1	01/22/21	01/22/21 16:44	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*	*01/22/21*		*01/22/21 16:44*		
Surrogate: Toluene-d8			*75-120*	*104 %*	*01/22/21*		*01/22/21 16:44*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*96 %*	*01/22/21*		*01/22/21 16:44*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: 1600 SPARROWS POINT BLVD
Project Manager: Matthew Newman

Reported:
01/29/21 13:15

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Company Name: Tradepoint Atlantic

Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219

Project Name: Sparrows Point IM

Project Manager: Matt Newman (443) 791-9046

Sampler(s): Guy Davis/ARM Group (443) 610-0211

Attention/Invoice: ap@tradepointatlantic.com

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410–247–7600 • Fax 410–247–7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	VOCs+NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 5 DPE INF	1/22/21	0910				X	1	X			101220 4-01
CELL 3 SVE INF	↓	0850				X	1	X			-02
CELL 1 SVE INF	1/22/21	0915				X	1	X			-03

Relinquished by: *(Signature)* [signature] — Date/Time 1/22/21 1130 — Received by: *(Signature)* — Relinquished by: *(Signature)* — Date/Time — Received by: *(Signature)*

(Printed) Guy L Davis — *(Printed)* — *(Printed)* — *(Printed)*

Relinquished by: *(Signature)* — Date/Time 1/22/21 11:34 — Received by Lab: *(Signature)* [signature]

(Printed) — *(Printed)* Rachel Horner

Turn Around Time:
- [X] Normal (7 day)
- [ ] 5 day
- [ ] 4 day
- [ ] 3 day
- [ ] Rush (2 day)
- [ ] Next Day
- [ ] Other: _____
- [ ] Specific Due Date: _____

Lab Use:
Temp: ___°C
- [ ] Received on Ice
- [ ] Received same day

Delivery Method:
- [X] Courier
- [ ] Client
- [ ] UPS
- [ ] FedEx
- [ ] USPS
- [ ] Other: _____

Special Instructions/QC Requirements & Comments:
Please report to:
Matt Newman mnewman@tradepointatlantic.com
Copy to:
Guy Davis GDavis@armgroup.net
Doug Hamilton DHamilton@armgroup.net

Sample Disposal:
- [ ] Return to Client
- [ ] Disposal by lab
- [ ] Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

18 February 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 02/10/21 11:54.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,

Rabecka Koons
Quality Assurance Officer

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 5 DPE INF		1021009-01	Vapor	02/10/21 07:40	02/10/21 11:54
CELL 3 SVE INF		1021009-02	Vapor	02/10/21 08:20	02/10/21 11:54
CELL 1 SVE INF		1021009-03	Vapor	02/10/21 08:30	02/10/21 11:54

Rebecka Koons

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

CELL 5 DPE INF

1021009-01 (Vapor)
Sample Date: 02/10/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	02/10/21	02/10/21 14:22	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	02/10/21	02/10/21 14:22	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Benzene	**0.71**		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	02/10/21	02/10/21 14:22	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	02/10/21	02/10/21 14:22	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	02/10/21	02/10/21 14:22	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	02/10/21	02/10/21 14:22	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	02/10/21	02/10/21 14:22	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

CELL 5 DPE INF

1021009-01 (Vapor)
Sample Date: 02/10/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	02/10/21	02/10/21 14:22	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	02/10/21	02/10/21 14:22	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	02/10/21	02/10/21 14:22	AS
Naphthalene	**0.14**	J	ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Styrene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Toluene	**0.35**		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

CELL 5 DPE INF

1021009-01 (Vapor)
Sample Date: 02/10/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
o-Xylene	**0.17**	J	ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
m- & p-Xylenes	**0.54**		ug/L	0.20	0.10	0.1	02/10/21	02/10/21 14:22	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*			*02/10/21*	*02/10/21 14:22*	
Surrogate: Toluene-d8			*75-120*	*106 %*			*02/10/21*	*02/10/21 14:22*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*91 %*			*02/10/21*	*02/10/21 14:22*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

CELL 3 SVE INF

1021009-02 (Vapor)
Sample Date: 02/10/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	2.00	2.00	0.2	02/10/21	02/10/21 14:46	AS
tert-Amyl alcohol (TAA)	ND		ug/L	4.00	4.00	0.2	02/10/21	02/10/21 14:46	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Benzene	**30.2**		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Bromobenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Bromochloromethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Bromodichloromethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Bromoform	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Bromomethane	ND		ug/L	1.00	1.00	0.2	02/10/21	02/10/21 14:46	AS
tert-Butanol (TBA)	ND		ug/L	3.00	3.00	0.2	02/10/21	02/10/21 14:46	AS
2-Butanone (MEK)	ND		ug/L	2.00	2.00	0.2	02/10/21	02/10/21 14:46	AS
n-Butylbenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
sec-Butylbenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
tert-Butylbenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Carbon disulfide	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Carbon tetrachloride	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Chlorobenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Chloroethane	ND		ug/L	1.00	1.00	0.2	02/10/21	02/10/21 14:46	AS
Chloroform	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Chloromethane	ND		ug/L	1.00	1.00	0.2	02/10/21	02/10/21 14:46	AS
2-Chlorotoluene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
4-Chlorotoluene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Dibromochloromethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Dibromomethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,2-Dichlorobenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,3-Dichlorobenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,4-Dichlorobenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Dichlorodifluoromethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,1-Dichloroethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,2-Dichloroethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

CELL 3 SVE INF

1021009-02 (Vapor)
Sample Date: 02/10/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
cis-1,2-Dichloroethene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
trans-1,2-Dichloroethene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Dichlorofluoromethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,2-Dichloropropane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,3-Dichloropropane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
2,2-Dichloropropane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,1-Dichloropropene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
cis-1,3-Dichloropropene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
trans-1,3-Dichloropropene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Ethylbenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Hexachlorobutadiene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
2-Hexanone	ND		ug/L	2.00	2.00	0.2	02/10/21	02/10/21 14:46	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
4-Isopropyltoluene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
4-Methyl-2-pentanone	ND		ug/L	2.00	2.00	0.2	02/10/21	02/10/21 14:46	AS
Methylene chloride	ND		ug/L	2.00	2.00	0.2	02/10/21	02/10/21 14:46	AS
Naphthalene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
n-Propylbenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Styrene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Tetrachloroethene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Toluene	**2.02**		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,1,1-Trichloroethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,1,2-Trichloroethane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Trichloroethene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

CELL 3 SVE INF

1021009-02 (Vapor)
Sample Date: 02/10/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Vinyl chloride	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
o-Xylene	ND		ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
m- & p-Xylenes	**0.25**	J	ug/L	0.40	0.20	0.2	02/10/21	02/10/21 14:46	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*			*02/10/21*	*02/10/21 14:46*	
Surrogate: Toluene-d8			*75-120*	*106 %*			*02/10/21*	*02/10/21 14:46*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*92 %*			*02/10/21*	*02/10/21 14:46*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

CELL 1 SVE INF

1021009-03 (Vapor)
Sample Date: 02/10/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	10.0	10.0	1	02/10/21	02/10/21 15:09	AS
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	02/10/21	02/10/21 15:09	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Benzene	**90.6**		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Bromobenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Bromochloromethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Bromodichloromethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Bromoform	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Bromomethane	ND		ug/L	5.00	5.00	1	02/10/21	02/10/21 15:09	AS
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	02/10/21	02/10/21 15:09	AS
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	02/10/21	02/10/21 15:09	AS
n-Butylbenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
sec-Butylbenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
tert-Butylbenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Carbon disulfide	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Carbon tetrachloride	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Chlorobenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Chloroethane	ND		ug/L	5.00	5.00	1	02/10/21	02/10/21 15:09	AS
Chloroform	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Chloromethane	ND		ug/L	5.00	5.00	1	02/10/21	02/10/21 15:09	AS
2-Chlorotoluene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
4-Chlorotoluene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Dibromochloromethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,2-Dibromoethane (EDB)	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Dibromomethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,2-Dichlorobenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,3-Dichlorobenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,4-Dichlorobenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Dichlorodifluoromethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,1-Dichloroethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,2-Dichloroethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

CELL 1 SVE INF

1021009-03 (Vapor)
Sample Date: 02/10/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
cis-1,2-Dichloroethene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
trans-1,2-Dichloroethene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Dichlorofluoromethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,2-Dichloropropane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,3-Dichloropropane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
2,2-Dichloropropane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,1-Dichloropropene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
cis-1,3-Dichloropropene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
trans-1,3-Dichloropropene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Diisopropyl ether (DIPE)	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Ethylbenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Hexachlorobutadiene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
2-Hexanone	ND		ug/L	10.0	10.0	1	02/10/21	02/10/21 15:09	AS
Isopropylbenzene (Cumene)	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
4-Isopropyltoluene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	02/10/21	02/10/21 15:09	AS
Methylene chloride	ND		ug/L	10.0	10.0	1	02/10/21	02/10/21 15:09	AS
Naphthalene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
n-Propylbenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Styrene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Tetrachloroethene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Toluene	**2.28**		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,2,3-Trichlorobenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,2,4-Trichlorobenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,1,1-Trichloroethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,1,2-Trichloroethane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Trichloroethene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

CELL 1 SVE INF

1021009-03 (Vapor)
Sample Date: 02/10/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,2,4-Trimethylbenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
1,3,5-Trimethylbenzene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Vinyl chloride	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
o-Xylene	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
m- & p-Xylenes	ND		ug/L	2.00	1.00	1	02/10/21	02/10/21 15:09	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*			*02/10/21*	*02/10/21 15:09*	
Surrogate: Toluene-d8			*75-120*	*106 %*			*02/10/21*	*02/10/21 15:09*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*91 %*			*02/10/21*	*02/10/21 15:09*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
02/18/21 10:20

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 5 DPE INF	2/10/21	0740				X	1	X			1021009-01
CELL 3 SVE INF	↓	0820				X	1	X			-02
CELL 1 SVE INF	2/10/21	0830				X	1	X			-03

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed)	2/10/21 1150	(Printed)	(Printed)		(Printed)
Relinquished by: (Signature)	Date/Time	Received by Lab: (Signature)			
(Printed)	2-10-21 11:54	(Printed) Lori Foster			

Turn Around Time:
- [x] Normal (7 day)
- [ ] 5 day
- [ ] 4 day
- [ ] 3 day
- [ ] Rush (2 day)
- [ ] Next Day
- [ ] Other: _____
- [ ] Specific Due Date: _____

Lab Use:
Temp: _____°C
- [ ] Received on Ice
- [ ] Received same day

Delivery Method:
- [ ] Courier
- [ ] Client
- [ ] UPS
- [ ] FedEx
- [ ] USPS
- [ ] Other: _____

Special Instructions/QC Requirements & Comments:
Please report to:
Matt Newman mnewman@tradepointatlantic.com
Copy to:
Guy Davis GDavis@armgroup.net
Doug Hamilton DHamilton@armgroup.net

Sample Disposal:
- [ ] Return to Client
- [ ] Disposal by lab
- [ ] Archive for _____ days

MSS-F001-004

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

12 March 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 03/03/21 11:47.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

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

Sincerely,



Rabecka Koons
Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 3 SVE INF		1030309-01	Vapor	03/03/21 07:00	03/03/21 11:47
CELL 1 SVE INF		1030309-02	Vapor	03/03/21 07:20	03/03/21 11:47
CELL 5 DPE INF		1030309-03	Vapor	03/03/21 07:30	03/03/21 11:47

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

CELL 3 SVE INF

1030309-01 (Vapor)
Sample Date: 03/03/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	2.00	2.00	0.2	03/05/21	03/05/21 12:36	AS
tert-Amyl alcohol (TAA)	ND		ug/L	4.00	4.00	0.2	03/05/21	03/05/21 12:36	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Benzene	**25.3**		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Bromobenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Bromochloromethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Bromodichloromethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Bromoform	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Bromomethane	ND		ug/L	1.00	1.00	0.2	03/05/21	03/05/21 12:36	AS
tert-Butanol (TBA)	ND		ug/L	3.00	3.00	0.2	03/05/21	03/05/21 12:36	AS
2-Butanone (MEK)	ND		ug/L	2.00	2.00	0.2	03/05/21	03/05/21 12:36	AS
n-Butylbenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
sec-Butylbenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
tert-Butylbenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Carbon disulfide	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Carbon tetrachloride	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Chlorobenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Chloroethane	ND		ug/L	1.00	1.00	0.2	03/05/21	03/05/21 12:36	AS
Chloroform	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Chloromethane	ND		ug/L	1.00	1.00	0.2	03/05/21	03/05/21 12:36	AS
2-Chlorotoluene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
4-Chlorotoluene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Dibromochloromethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Dibromomethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,2-Dichlorobenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,3-Dichlorobenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,4-Dichlorobenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Dichlorodifluoromethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,1-Dichloroethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

CELL 3 SVE INF

1030309-01 (Vapor)
Sample Date: 03/03/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2-Dichloroethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,1-Dichloroethene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
cis-1,2-Dichloroethene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
trans-1,2-Dichloroethene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Dichlorofluoromethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,2-Dichloropropane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,3-Dichloropropane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
2,2-Dichloropropane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,1-Dichloropropene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
cis-1,3-Dichloropropene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
trans-1,3-Dichloropropene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Ethylbenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Hexachlorobutadiene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
2-Hexanone	ND		ug/L	2.00	2.00	0.2	03/05/21	03/05/21 12:36	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
4-Isopropyltoluene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
4-Methyl-2-pentanone	ND		ug/L	2.00	2.00	0.2	03/05/21	03/05/21 12:36	AS
Methylene chloride	ND		ug/L	2.00	2.00	0.2	03/05/21	03/05/21 12:36	AS
Naphthalene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
n-Propylbenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Styrene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Tetrachloroethene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Toluene	**2.19**		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,1,1-Trichloroethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,1,2-Trichloroethane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS

Rebecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

CELL 3 SVE INF

1030309-01 (Vapor)
Sample Date: 03/03/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
Trichloroethene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,2,3-Trichloropropane	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Vinyl chloride	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
o-Xylene	ND		ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
m- & p-Xylenes	**0.22**	J	ug/L	0.40	0.20	0.2	03/05/21	03/05/21 12:36	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*			*03/05/21*	*03/05/21 12:36*	
Surrogate: Toluene-d8			*75-120*	*100 %*			*03/05/21*	*03/05/21 12:36*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*99 %*			*03/05/21*	*03/05/21 12:36*	

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

CELL 1 SVE INF

1030309-02 (Vapor)
Sample Date: 03/03/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	10.0	10.0	1	03/05/21	03/05/21 13:00	AS
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	03/05/21	03/05/21 13:00	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Benzene	**107**		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Bromobenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Bromochloromethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Bromodichloromethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Bromoform	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Bromomethane	ND		ug/L	5.00	5.00	1	03/05/21	03/05/21 13:00	AS
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	03/05/21	03/05/21 13:00	AS
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	03/05/21	03/05/21 13:00	AS
n-Butylbenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
sec-Butylbenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
tert-Butylbenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Carbon disulfide	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Carbon tetrachloride	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Chlorobenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Chloroethane	ND		ug/L	5.00	5.00	1	03/05/21	03/05/21 13:00	AS
Chloroform	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Chloromethane	ND		ug/L	5.00	5.00	1	03/05/21	03/05/21 13:00	AS
2-Chlorotoluene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
4-Chlorotoluene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Dibromochloromethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,2-Dibromoethane (EDB)	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Dibromomethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,2-Dichlorobenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,3-Dichlorobenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,4-Dichlorobenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Dichlorodifluoromethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,1-Dichloroethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS

Rebecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

CELL 1 SVE INF

1030309-02 (Vapor)
Sample Date: 03/03/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2-Dichloroethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,1-Dichloroethene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
cis-1,2-Dichloroethene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
trans-1,2-Dichloroethene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Dichlorofluoromethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,2-Dichloropropane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,3-Dichloropropane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
2,2-Dichloropropane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,1-Dichloropropene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
cis-1,3-Dichloropropene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
trans-1,3-Dichloropropene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Diisopropyl ether (DIPE)	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Ethylbenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Hexachlorobutadiene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
2-Hexanone	ND		ug/L	10.0	10.0	1	03/05/21	03/05/21 13:00	AS
Isopropylbenzene (Cumene)	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
4-Isopropyltoluene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	03/05/21	03/05/21 13:00	AS
Methylene chloride	ND		ug/L	10.0	10.0	1	03/05/21	03/05/21 13:00	AS
Naphthalene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
n-Propylbenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Styrene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Tetrachloroethene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Toluene	**2.00**		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,2,3-Trichlorobenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,2,4-Trichlorobenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,1,1-Trichloroethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,1,2-Trichloroethane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

CELL 1 SVE INF

1030309-02 (Vapor)
Sample Date: 03/03/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
Trichloroethene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,2,3-Trichloropropane	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,2,4-Trimethylbenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
1,3,5-Trimethylbenzene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Vinyl chloride	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
o-Xylene	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
m- & p-Xylenes	ND		ug/L	2.00	1.00	1	03/05/21	03/05/21 13:00	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*			*03/05/21*	*03/05/21 13:00*	
Surrogate: Toluene-d8			*75-120*	*99 %*			*03/05/21*	*03/05/21 13:00*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*99 %*			*03/05/21*	*03/05/21 13:00*	

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

CELL 5 DPE INF

1030309-03 (Vapor)
Sample Date: 03/03/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	03/05/21	03/05/21 13:25	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	03/05/21	03/05/21 13:25	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Benzene	**0.84**		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	03/05/21	03/05/21 13:25	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	03/05/21	03/05/21 13:25	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	03/05/21	03/05/21 13:25	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	03/05/21	03/05/21 13:25	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	03/05/21	03/05/21 13:25	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS

Rebecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

CELL 5 DPE INF

1030309-03 (Vapor)
Sample Date: 03/03/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	03/05/21	03/05/21 13:25	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	03/05/21	03/05/21 13:25	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	03/05/21	03/05/21 13:25	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Styrene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Toluene	**0.33**		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS

Rebecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

CELL 5 DPE INF

1030309-03 (Vapor)
Sample Date: 03/03/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
Trichloroethene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
o-Xylene	**0.14**	J	ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
m- & p-Xylenes	**0.45**		ug/L	0.20	0.10	0.1	03/05/21	03/05/21 13:25	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*			*03/05/21*	*03/05/21 13:25*	
Surrogate: Toluene-d8			*75-120*	*100 %*			*03/05/21*	*03/05/21 13:25*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*100 %*			*03/05/21*	*03/05/21 13:25*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
03/12/21 10:30

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 3 SVE INF	3/3/21	0700				X	1	X			1030309-01
CELL 1 SVE INF	↓	0720				X	1	X			-02
CELL 5 DPE INF	3/3/21	0730				X	1	X			-03

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*
(Printed) Guy L Davis	3/3/21 1145	*(Printed)*	*(Printed)*		*(Printed)*
Relinquished by: *(Signature)*	Date/Time	Received by Lab: *(Signature)*			
(Printed)	3-3-21 11:47	*(Printed)* Lori Foster			

Turn Around Time:
- [x] Normal (7 day)
- [ ] 5 day
- [ ] 4 day
- [ ] 3 day
- [ ] Rush (2 day)
- [ ] Next Day
- [ ] Other: _____
- [ ] Specific Due Date: _____

Lab Use:
Temp: - °C
- [ ] Received on Ice
- [ ] Received same day

Delivery Method:
- [ ] Courier
- [ ] Client
- [ ] UPS
- [ ] FedEx
- [ ] USPS
- [x] Other: _____

Special Instructions/QC Requirements & Comments:
Please report to:

Bob Tworkowski	btworkowski@tradepointatlantic.com
Matt Newman	mnewman@tradepointatlantic.com
Guy Davis	GDavis@armgroup.net
Doug Hamilton	DHamilton@armgroup.net

Sample Disposal:
- [ ] Return to Client
- [ ] Disposal by lab
- [ ] Archive for _____ days

MSS-F001-004

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

20 April 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 04/13/21 08:56.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/20/21 11:54

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 1 SVE INF		1041301-01	Vapor	04/13/21 07:05	04/13/21 08:56

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/20/21 11:54

CELL 1 SVE INF

1041301-01 (Vapor)
Sample Date: 04/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	**3.23**		ug/L	2.50	2.50	0.25	04/14/21	04/14/21 17:43	AS
tert-Amyl alcohol (TAA)	ND		ug/L	5.00	5.00	0.25	04/14/21	04/14/21 17:43	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Benzene	**35.9**		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Bromobenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Bromochloromethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Bromodichloromethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Bromoform	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Bromomethane	ND		ug/L	1.25	1.25	0.25	04/14/21	04/14/21 17:43	AS
tert-Butanol (TBA)	ND		ug/L	3.75	3.75	0.25	04/14/21	04/14/21 17:43	AS
2-Butanone (MEK)	ND		ug/L	2.50	2.50	0.25	04/14/21	04/14/21 17:43	AS
n-Butylbenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
sec-Butylbenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
tert-Butylbenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Carbon disulfide	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Carbon tetrachloride	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Chlorobenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Chloroethane	ND		ug/L	1.25	1.25	0.25	04/14/21	04/14/21 17:43	AS
Chloroform	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Chloromethane	ND		ug/L	1.25	1.25	0.25	04/14/21	04/14/21 17:43	AS
2-Chlorotoluene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
4-Chlorotoluene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Dibromochloromethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Dibromomethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,2-Dichlorobenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,3-Dichlorobenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,4-Dichlorobenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Dichlorodifluoromethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,1-Dichloroethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,2-Dichloroethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/20/21 11:54

CELL 1 SVE INF

1041301-01 (Vapor)
Sample Date: 04/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
cis-1,2-Dichloroethene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
trans-1,2-Dichloroethene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Dichlorofluoromethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,2-Dichloropropane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,3-Dichloropropane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
2,2-Dichloropropane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,1-Dichloropropene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
cis-1,3-Dichloropropene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
trans-1,3-Dichloropropene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Ethylbenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Hexachlorobutadiene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
2-Hexanone	ND		ug/L	2.50	2.50	0.25	04/14/21	04/14/21 17:43	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
4-Isopropyltoluene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
4-Methyl-2-pentanone	ND		ug/L	2.50	2.50	0.25	04/14/21	04/14/21 17:43	AS
Methylene chloride	ND		ug/L	2.50	2.50	0.25	04/14/21	04/14/21 17:43	AS
Naphthalene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
n-Propylbenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Styrene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Tetrachloroethene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Toluene	**0.92**		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,1,1-Trichloroethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,1,2-Trichloroethane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Trichloroethene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/20/21 11:54

CELL 1 SVE INF

1041301-01 (Vapor)
Sample Date: 04/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Vinyl chloride	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
o-Xylene	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
m- & p-Xylenes	ND		ug/L	0.50	0.25	0.25	04/14/21	04/14/21 17:43	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*		*04/14/21*		*04/14/21 17:43*	
Surrogate: Toluene-d8			*75-120*	*101 %*		*04/14/21*		*04/14/21 17:43*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*96 %*		*04/14/21*		*04/14/21 17:43*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/20/21 11:54

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/20/21 11:54

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/20/21 11:54

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219								Analysis Requested									**CHAIN-OF-CUSTODY RECORD**		
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046																	Maryland Spectral Services, Inc. 1500 Caton Center Drive, Suite G Baltimore, MD 21227 410–247–7600 • Fax 410–247–7602 reporting@mdspectral.com		
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com																	Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)		
Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260										Preservative	Field Notes	MSS Lab ID
CELL 1 SVE INF	4/13/21	0705				X	1	X												1041301-01

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*
(Printed) Guy L Davis	4/13/21 0855	*(Printed)*	*(Printed)*		*(Printed)*
Relinquished by: *(Signature)*	Date/Time	Received by Lab: *(Signature)*	Turn Around Time:	Lab Use:	
(Printed)	4/13/21 8:56	*(Printed)* Rachel Horner	☒ Normal (7 day) ☐ 5 day ☐ 4 day ☐ 3 day ☐ Rush (2 day) ☐ Next Day ☐ Other: _____ ☐ Specific Due Date: _____	Temp: ____ °C ☐ Received on Ice ☐ Received same day	

Delivery Method:	Special Instructions/QC Requirements & Comments:	Sample Disposal:
☒ Courier ☐ Client ☐ UPS ☐ FedEx ☐ USPS ☐ Other:_____	Please report to: Bob Tworkowski btworkowski@tradepointatlantic.com Matt Newman mnewman@tradepointatlantic.com Guy Davis GDavis@armgroup.net Doug Hamilton DHamilton@armgroup.net	☐ Return to Client ☒ Disposal by lab ☐ Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

06 May 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 04/27/21 09:54.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/06/21 08:32

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 1 SVE INF		1042701-01	Vapor	04/27/21 09:00	04/27/21 09:54

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/06/21 08:32

CELL 1 SVE INF

1042701-01 (Vapor)
Sample Date: 04/27/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	04/29/21	04/29/21 16:04	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	04/29/21	04/29/21 16:04	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Benzene	**6.65**		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	04/29/21	04/29/21 16:04	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	04/29/21	04/29/21 16:04	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	04/29/21	04/29/21 16:04	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	04/29/21	04/29/21 16:04	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	04/29/21	04/29/21 16:04	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/06/21 08:32

CELL 1 SVE INF

1042701-01 (Vapor)
Sample Date: 04/27/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	04/29/21	04/29/21 16:04	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	04/29/21	04/29/21 16:04	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	04/29/21	04/29/21 16:04	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Styrene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Toluene	**0.22**		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/06/21 08:32

CELL 1 SVE INF

1042701-01 (Vapor)
Sample Date: 04/27/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
m- & p-Xylenes	ND		ug/L	0.20	0.10	0.1	04/29/21	04/29/21 16:04	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*93 %*	*04/29/21*		*04/29/21 16:04*		
Surrogate: Toluene-d8			*75-120*	*94 %*	*04/29/21*		*04/29/21 16:04*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*88 %*	*04/29/21*		*04/29/21 16:04*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/06/21 08:32

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/06/21 08:32

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/06/21 08:32

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 1 SVE INF	4/27/21	0900				X	1	X			104270 1-01

Analysis Requested

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) Guy L Davis	4/27/21 0950	(Printed)	(Printed)		(Printed)
Relinquished by: (Signature)	Date/Time 4/27/21 9:54	Received by Lab: (Signature)			
(Printed)		(Printed) Rachel Horner			

Turn Around Time:
- [X] Normal (7 day)
- [ ] 5 day
- [ ] 4 day
- [ ] 3 day
- [ ] Rush (2 day)
- [ ] Next Day
- [ ] Other: _____
- [ ] Specific Due Date: _____

Lab Use:
Temp: ____ °C
- [ ] Received on Ice
- [x] Received same day

Delivery Method:
- [X] Courier (ME)
- [ ] Client
- [ ] UPS
- [ ] FedEx
- [ ] USPS
- [ ] Other: _____

Special Instructions/QC Requirements & Comments:
Please report to:

Bob Tworkowski	btworkowski@tradepointatlantic.com
Matt Newman	mnewman@tradepointatlantic.com
Guy Davis	GDavis@armgroup.net
Doug Hamilton	DHamilton@armgroup.net

Sample Disposal:
- [ ] Return to Client
- [ ] Disposal by lab
- [ ] Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

14 April 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 04/06/21 12:11.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/14/21 09:50

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 3 SVE INF		1040615-01	Vapor	04/06/21 06:40	04/06/21 12:11
CELL 5 DPE INF		1040615-02	Vapor	04/06/21 07:05	04/06/21 12:11

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/14/21 09:50

CELL 3 SVE INF

1040615-01 (Vapor)
Sample Date: 04/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	04/07/21	04/07/21 15:45	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	04/07/21	04/07/21 15:45	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Benzene	**2.33**		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	04/07/21	04/07/21 15:45	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	04/07/21	04/07/21 15:45	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	04/07/21	04/07/21 15:45	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	04/07/21	04/07/21 15:45	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	04/07/21	04/07/21 15:45	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/14/21 09:50

CELL 3 SVE INF

1040615-01 (Vapor)
Sample Date: 04/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	04/07/21	04/07/21 15:45	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	04/07/21	04/07/21 15:45	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	04/07/21	04/07/21 15:45	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Styrene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Toluene	**0.18**	J	ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/14/21 09:50

CELL 3 SVE INF

1040615-01 (Vapor)
Sample Date: 04/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
m- & p-Xylenes	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 15:45	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*04/07/21*		*04/07/21 15:45*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*04/07/21*		*04/07/21 15:45*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*96 %*	*04/07/21*		*04/07/21 15:45*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/14/21 09:50

CELL 5 DPE INF

1040615-02 (Vapor)
Sample Date: 04/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	04/07/21	04/07/21 13:20	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	04/07/21	04/07/21 13:20	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Benzene	**1.24**		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	04/07/21	04/07/21 13:20	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	04/07/21	04/07/21 13:20	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	04/07/21	04/07/21 13:20	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	04/07/21	04/07/21 13:20	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	04/07/21	04/07/21 13:20	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/14/21 09:50

CELL 5 DPE INF

1040615-02 (Vapor)
Sample Date: 04/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	04/07/21	04/07/21 13:20	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	04/07/21	04/07/21 13:20	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	04/07/21	04/07/21 13:20	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Styrene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Toluene	**0.56**		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/14/21 09:50

CELL 5 DPE INF

1040615-02 (Vapor)
Sample Date: 04/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,2,4-Trimethylbenzene	**0.11**	J	ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
o-Xylene	**0.20**		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
m- & p-Xylenes	**0.68**		ug/L	0.20	0.10	0.1	04/07/21	04/07/21 13:20	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*			*04/07/21*	*04/07/21 13:20*	
Surrogate: Toluene-d8			*75-120*	*99 %*			*04/07/21*	*04/07/21 13:20*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*			*04/07/21*	*04/07/21 13:20*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/14/21 09:50

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/14/21 09:50

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
04/14/21 09:50

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219	Analysis Requested	**CHAIN-OF-CUSTODY RECORD**
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046		Maryland Spectral Services, Inc. 1500 Caton Center Drive, Suite G Baltimore, MD 21227 410-247-7600 • Fax 410-247-7602 reporting@mdspectral.com
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com		Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 3 SVE INF	4/6/21	0640				X	1	X			10406150 1
CELL 5 DPE INF	4/6/21	0705				X	1	X			-02

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*
(Printed) Guy L Davis	4/6/21/ 1210	*(Printed)*	*(Printed)*		*(Printed)*
Relinquished by: *(Signature)*	Date/Time 4-6-21 12:11	Received by Lab: *(Signature)*	Turn Around Time:	Lab Use:	
(Printed)		*(Printed)* Lori Foster	X Normal (7 day) ☐ 5 day ☐ 4 day ☐ 3 day ☐ Rush (2 day) ☐ Next Day ☐ Other: _____ ☐ Specific Due Date: _____	Temp: _____ °C ☐ Received on Ice ☐ Received same day	

Delivery Method:	Special Instructions/QC Requirements & Comments:	Sample Disposal:
X Courier ME ☐ Client ☐ UPS ☐ FedEx ☐ USPS ☐ Other:_____	Please report to: Bob Tworkowski btworkowski@tradepointatlantic.com Matt Newman mnewman@tradepointatlantic.com Guy Davis GDavis@armgroup.net Doug Hamilton DHamilton@armgroup.net	☐ Return to Client ☐ Disposal by lab ☐ Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

21 May 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 05/14/21 09:50.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 3 SVE INF		1051401-01	Vapor	05/14/21 07:15	05/14/21 09:50
CELL 1 SVE INF		1051401-02	Vapor	05/14/21 07:55	05/14/21 09:50
CELL 5 DPE INF		1051401-03	Vapor	05/14/21 08:10	05/14/21 09:50

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

CELL 3 SVE INF

1051401-01 (Vapor)
Sample Date: 05/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 15:54	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	05/14/21	05/14/21 15:54	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Benzene	**9.30**		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	05/14/21	05/14/21 15:54	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	05/14/21	05/14/21 15:54	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 15:54	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	05/14/21	05/14/21 15:54	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	05/14/21	05/14/21 15:54	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

CELL 3 SVE INF

1051401-01 (Vapor)
Sample Date: 05/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 15:54	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 15:54	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 15:54	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Styrene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Toluene	**0.76**		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

CELL 3 SVE INF

1051401-01 (Vapor)
Sample Date: 05/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
m- & p-Xylenes	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 15:54	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*	*05/14/21*		*05/14/21 15:54*		
Surrogate: Toluene-d8			*75-120*	*103 %*	*05/14/21*		*05/14/21 15:54*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*96 %*	*05/14/21*		*05/14/21 15:54*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

CELL 1 SVE INF

1051401-02 (Vapor)
Sample Date: 05/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 16:18	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	05/14/21	05/14/21 16:18	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Benzene	**3.65**		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	05/14/21	05/14/21 16:18	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	05/14/21	05/14/21 16:18	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 16:18	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	05/14/21	05/14/21 16:18	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	05/14/21	05/14/21 16:18	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

CELL 1 SVE INF

1051401-02 (Vapor)
Sample Date: 05/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 16:18	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 16:18	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 16:18	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Styrene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Toluene	**1.06**		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

CELL 1 SVE INF

1051401-02 (Vapor)
Sample Date: 05/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
o-Xylene	**0.34**		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
m- & p-Xylenes	**0.29**		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:18	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*			*05/14/21*	*05/14/21 16:18*	
Surrogate: Toluene-d8			*75-120*	*99 %*			*05/14/21*	*05/14/21 16:18*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*			*05/14/21*	*05/14/21 16:18*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

CELL 5 DPE INF

1051401-03 (Vapor)
Sample Date: 05/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 16:42	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	05/14/21	05/14/21 16:42	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Benzene	**0.55**		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	05/14/21	05/14/21 16:42	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	05/14/21	05/14/21 16:42	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 16:42	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	05/14/21	05/14/21 16:42	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	05/14/21	05/14/21 16:42	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

CELL 5 DPE INF

1051401-03 (Vapor)
Sample Date: 05/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 16:42	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 16:42	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	05/14/21	05/14/21 16:42	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Styrene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Toluene	**0.30**		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

CELL 5 DPE INF

1051401-03 (Vapor)
Sample Date: 05/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
o-Xylene	**0.10**	J	ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
m- & p-Xylenes	**0.33**		ug/L	0.20	0.10	0.1	05/14/21	05/14/21 16:42	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*			*05/14/21*	*05/14/21 16:42*	
Surrogate: Toluene-d8			*75-120*	*100 %*			*05/14/21*	*05/14/21 16:42*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*			*05/14/21*	*05/14/21 16:42*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
05/21/21 11:41

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	Analysis Requested: FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 3 SVE INF	5/14/21	0715				X	1	X			1051401-01
CELL 1 SVE INF	↓	0755				X	1	X			-02
CELL 5 DPE INF	5/14/21	0810				X	1	X			-03

~~1051401-01~~ RH 5/14/21

Relinquished by: *(Signature)* [signature] /ARM	Date/Time 5/14/21/ 0950	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time
(Printed) Guy L Davis		*(Printed)*	*(Printed)*	
Relinquished by: *(Signature)*	Date/Time 5/14/21 9:50	Received by Lab: *(Signature)* [signature]	Received by: *(Signature)*	
(Printed)		*(Printed)* Rachel Horner	*(Printed)*	

Turn Around Time:
- ☒ Normal (7 day)
- ☐ 5 day
- ☐ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:
Temp: ___ °C
- ☐ Received on Ice
- ☐ Received same day

Delivery Method:
- ☒ Courier (ME)
- ☐ Client
- ☐ UPS
- ☐ FedEx
- ☐ USPS
- ☐ Other: _____

Special Instructions/QC Requirements & Comments:
Please report to:

Bob Tworkowski	btworkowski@tradepointatlantic.com
Matt Newman	mnewman@tradepointatlantic.com
Guy Davis	GDavis@armgroup.net
Doug Hamilton	DHamilton@armgroup.net

Sample Disposal:
- ☐ Return to Client
- ☒ Disposal by lab
- ☐ Archive for _____ days

MSS-F001-004

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

16 June 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 06/09/21 11:14.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 5 DPE INF		1060902-01	Vapor	06/09/21 06:45	06/09/21 11:14
CELL 3 SVE INF		1060902-02	Vapor	06/09/21 08:00	06/09/21 11:14
CELL 1 SVE INF		1060902-03	Vapor	06/09/21 09:30	06/09/21 11:14

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

CELL 5 DPE INF

1060902-01 (Vapor)
Sample Date: 06/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	06/10/21	06/10/21 14:45	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	06/10/21	06/10/21 14:45	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Benzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	06/10/21	06/10/21 14:45	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	06/10/21	06/10/21 14:45	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	06/10/21	06/10/21 14:45	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	06/10/21	06/10/21 14:45	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	06/10/21	06/10/21 14:45	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

CELL 5 DPE INF

1060902-01 (Vapor)
Sample Date: 06/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	06/10/21	06/10/21 14:45	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	06/10/21	06/10/21 14:45	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	06/10/21	06/10/21 14:45	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Styrene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Toluene	**0.15**	J	ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

CELL 5 DPE INF

1060902-01 (Vapor)
Sample Date: 06/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
m- & p-Xylenes	**0.10**	J	ug/L	0.20	0.10	0.1	06/10/21	06/10/21 14:45	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*			*06/10/21*	*06/10/21 14:45*	
Surrogate: Toluene-d8			*75-120*	*99 %*			*06/10/21*	*06/10/21 14:45*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*95 %*			*06/10/21*	*06/10/21 14:45*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

CELL 3 SVE INF

1060902-02 (Vapor)
Sample Date: 06/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	06/10/21	06/10/21 15:10	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	06/10/21	06/10/21 15:10	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Benzene	**1.74**		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	06/10/21	06/10/21 15:10	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	06/10/21	06/10/21 15:10	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	06/10/21	06/10/21 15:10	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	06/10/21	06/10/21 15:10	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	06/10/21	06/10/21 15:10	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

CELL 3 SVE INF

1060902-02 (Vapor)
Sample Date: 06/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	06/10/21	06/10/21 15:10	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	06/10/21	06/10/21 15:10	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	06/10/21	06/10/21 15:10	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Styrene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Toluene	**0.21**		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

CELL 3 SVE INF

1060902-02 (Vapor)
Sample Date: 06/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
m- & p-Xylenes	ND		ug/L	0.20	0.10	0.1	06/10/21	06/10/21 15:10	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*111 %*	*06/10/21*		*06/10/21 15:10*		
Surrogate: Toluene-d8			*75-120*	*103 %*	*06/10/21*		*06/10/21 15:10*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*	*06/10/21*		*06/10/21 15:10*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

CELL 1 SVE INF

1060902-03RE1 (Vapor)
Sample Date: 06/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	10.0	10.0	1	06/10/21	06/10/21 16:23	AS
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	06/10/21	06/10/21 16:23	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Benzene	**128**		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Bromobenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Bromochloromethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Bromodichloromethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Bromoform	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Bromomethane	ND		ug/L	5.00	5.00	1	06/10/21	06/10/21 16:23	AS
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	06/10/21	06/10/21 16:23	AS
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	06/10/21	06/10/21 16:23	AS
n-Butylbenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
sec-Butylbenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
tert-Butylbenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Carbon disulfide	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Carbon tetrachloride	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Chlorobenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Chloroethane	ND		ug/L	5.00	5.00	1	06/10/21	06/10/21 16:23	AS
Chloroform	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Chloromethane	ND		ug/L	5.00	5.00	1	06/10/21	06/10/21 16:23	AS
2-Chlorotoluene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
4-Chlorotoluene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Dibromochloromethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,2-Dibromoethane (EDB)	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Dibromomethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,2-Dichlorobenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,3-Dichlorobenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,4-Dichlorobenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Dichlorodifluoromethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,1-Dichloroethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,2-Dichloroethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

CELL 1 SVE INF

1060902-03RE1 (Vapor)
Sample Date: 06/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
cis-1,2-Dichloroethene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
trans-1,2-Dichloroethene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Dichlorofluoromethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,2-Dichloropropane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,3-Dichloropropane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
2,2-Dichloropropane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,1-Dichloropropene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
cis-1,3-Dichloropropene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
trans-1,3-Dichloropropene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Diisopropyl ether (DIPE)	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Ethylbenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Hexachlorobutadiene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
2-Hexanone	ND		ug/L	10.0	10.0	1	06/10/21	06/10/21 16:23	AS
Isopropylbenzene (Cumene)	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
4-Isopropyltoluene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	06/10/21	06/10/21 16:23	AS
Methylene chloride	ND		ug/L	10.0	10.0	1	06/10/21	06/10/21 16:23	AS
Naphthalene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
n-Propylbenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Styrene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Tetrachloroethene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Toluene	**2.37**		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,2,3-Trichlorobenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,2,4-Trichlorobenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,1,1-Trichloroethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,1,2-Trichloroethane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Trichloroethene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

CELL 1 SVE INF

1060902-03RE1 (Vapor)
Sample Date: 06/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,2,4-Trimethylbenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
1,3,5-Trimethylbenzene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Vinyl chloride	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
o-Xylene	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
m- & p-Xylenes	ND		ug/L	2.00	1.00	1	06/10/21	06/10/21 16:23	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*109 %*	*06/10/21*		*06/10/21 16:23*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*06/10/21*		*06/10/21 16:23*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*98 %*	*06/10/21*		*06/10/21 16:23*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
06/16/21 09:51

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 5 DPE INF	6/9/21	0645				X	1	X			1060902 -01
CELL 3 SVE INF	↓	0800				X	1	X			-02
CELL 1 SVE INF	6/9/21	0930				X	1	X			-03

Analysis Requested

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) Guy L Davis	6/9/21 1115	(Printed)	(Printed)		(Printed)
Relinquished by: (Signature)	Date/Time	Received by Lab: (Signature)			
(Printed)	11:14 6-9-21	(Printed) Lori Foster			

Turn Around Time:
- ☒ Normal (7 day)
- ☐ 5 day
- ☐ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:
Temp: ____ °C
- ☐ Received on Ice
- ☐ Received same day

Delivery Method:
- ☒ Courier ME
- ☐ Client
- ☐ UPS
- ☐ FedEx
- ☐ USPS
- ☐ Other: _____

Special Instructions/QC Requirements & Comments:
Please report to:

Bob Tworkowski	btworkowski@tradepointatlantic.com
Matt Newman	mnewman@tradepointatlantic.com
Guy Davis	GDavis@armgroup.net
Doug Hamilton	DHamilton@armgroup.net

Sample Disposal:
- ☐ Return to Client
- ☒ Disposal by lab
- ☐ Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

20 July 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 07/14/21 14:20.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 3 SVE INF		1071410-01	Vapor	07/14/21 06:30	07/14/21 14:20
CELL 5 DPE INF		1071410-02	Vapor	07/14/21 07:35	07/14/21 14:20
CELL 1 SVE INF		1071410-03	Vapor	07/14/21 08:20	07/14/21 14:20

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

CELL 3 SVE INF

1071410-01 (Vapor)
Sample Date: 07/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	07/15/21	07/15/21 11:39	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	07/15/21	07/15/21 11:39	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Benzene	**1.21**		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	07/15/21	07/15/21 11:39	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	07/15/21	07/15/21 11:39	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	07/15/21	07/15/21 11:39	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	07/15/21	07/15/21 11:39	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	07/15/21	07/15/21 11:39	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

CELL 3 SVE INF

1071410-01 (Vapor)
Sample Date: 07/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	07/15/21	07/15/21 11:39	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	07/15/21	07/15/21 11:39	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	07/15/21	07/15/21 11:39	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Styrene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Toluene	**0.11**	J	ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

CELL 3 SVE INF

1071410-01 (Vapor)
Sample Date: 07/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
m- & p-Xylenes	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 11:39	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*			*07/15/21*	*07/15/21 11:39*	
Surrogate: Toluene-d8			*75-120*	*104 %*			*07/15/21*	*07/15/21 11:39*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*95 %*			*07/15/21*	*07/15/21 11:39*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

CELL 5 DPE INF

1071410-02 (Vapor)
Sample Date: 07/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	07/15/21	07/15/21 12:03	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	07/15/21	07/15/21 12:03	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Benzene	**0.96**		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	07/15/21	07/15/21 12:03	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	07/15/21	07/15/21 12:03	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	07/15/21	07/15/21 12:03	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	07/15/21	07/15/21 12:03	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	07/15/21	07/15/21 12:03	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

CELL 5 DPE INF

1071410-02 (Vapor)
Sample Date: 07/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	07/15/21	07/15/21 12:03	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	07/15/21	07/15/21 12:03	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	07/15/21	07/15/21 12:03	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Styrene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Toluene	**0.61**		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

CELL 5 DPE INF

1071410-02 (Vapor)
Sample Date: 07/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,2,4-Trimethylbenzene	**0.12**	J	ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
o-Xylene	**0.21**		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
m- & p-Xylenes	**0.71**		ug/L	0.20	0.10	0.1	07/15/21	07/15/21 12:03	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*			*07/15/21*	*07/15/21 12:03*	
Surrogate: Toluene-d8			*75-120*	*101 %*			*07/15/21*	*07/15/21 12:03*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*98 %*			*07/15/21*	*07/15/21 12:03*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

CELL 1 SVE INF

1071410-03 (Vapor)
Sample Date: 07/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	10.0	10.0	1	07/15/21	07/15/21 12:28	AS
tert-Amyl alcohol (TAA)	ND		ug/L	20.0	20.0	1	07/15/21	07/15/21 12:28	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Benzene	**156**		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Bromobenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Bromochloromethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Bromodichloromethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Bromoform	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Bromomethane	ND		ug/L	5.00	5.00	1	07/15/21	07/15/21 12:28	AS
tert-Butanol (TBA)	ND		ug/L	15.0	15.0	1	07/15/21	07/15/21 12:28	AS
2-Butanone (MEK)	ND		ug/L	10.0	10.0	1	07/15/21	07/15/21 12:28	AS
n-Butylbenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
sec-Butylbenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
tert-Butylbenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Carbon disulfide	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Carbon tetrachloride	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Chlorobenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Chloroethane	ND		ug/L	5.00	5.00	1	07/15/21	07/15/21 12:28	AS
Chloroform	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Chloromethane	ND		ug/L	5.00	5.00	1	07/15/21	07/15/21 12:28	AS
2-Chlorotoluene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
4-Chlorotoluene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Dibromochloromethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,2-Dibromoethane (EDB)	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Dibromomethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,2-Dichlorobenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,3-Dichlorobenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,4-Dichlorobenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Dichlorodifluoromethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,1-Dichloroethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,2-Dichloroethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

CELL 1 SVE INF

1071410-03 (Vapor)
Sample Date: 07/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
cis-1,2-Dichloroethene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
trans-1,2-Dichloroethene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Dichlorofluoromethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,2-Dichloropropane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,3-Dichloropropane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
2,2-Dichloropropane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,1-Dichloropropene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
cis-1,3-Dichloropropene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
trans-1,3-Dichloropropene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Diisopropyl ether (DIPE)	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Ethylbenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Hexachlorobutadiene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
2-Hexanone	ND		ug/L	10.0	10.0	1	07/15/21	07/15/21 12:28	AS
Isopropylbenzene (Cumene)	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
4-Isopropyltoluene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
4-Methyl-2-pentanone	ND		ug/L	10.0	10.0	1	07/15/21	07/15/21 12:28	AS
Methylene chloride	ND		ug/L	10.0	10.0	1	07/15/21	07/15/21 12:28	AS
Naphthalene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
n-Propylbenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Styrene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Tetrachloroethene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Toluene	**10.9**		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,2,3-Trichlorobenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,2,4-Trichlorobenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,1,1-Trichloroethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,1,2-Trichloroethane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Trichloroethene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

CELL 1 SVE INF

1071410-03 (Vapor)
Sample Date: 07/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,2,4-Trimethylbenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
1,3,5-Trimethylbenzene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Vinyl chloride	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
o-Xylene	ND		ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
m- & p-Xylenes	**1.01**	J	ug/L	2.00	1.00	1	07/15/21	07/15/21 12:28	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*		*07/15/21*		*07/15/21 12:28*	
Surrogate: Toluene-d8			*75-120*	*101 %*		*07/15/21*		*07/15/21 12:28*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*		*07/15/21*		*07/15/21 12:28*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/20/21 16:27

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point MD 21219
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 3 SVE INF	7/14/21	0630				X	1	X			071410-01
CELL 5 DPE INF	↓	0735				X	1	X			-02
CELL 1 SVE INF	7/14/21	0820				X	1	X			-03

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) Guy L Davis	7/14/21 1420	(Printed)	(Printed)		(Printed)
Relinquished by: (Signature)	Date/Time	Received by Lab: (Signature)			
(Printed)	7/14/21 1420	(Printed) Sam Hamner			

Turn Around Time:
- ☒ Normal (7 day)
- ☐ 5 day
- ☒ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:
Temp 2.5 °C
- ☐ Received on Ice
- ☑ Received same day

Delivery Method:
- ☒ Courier (ME)
- ☐ Client
- ☐ UPS
- ☐ FedEx
- ☐ USPS
- ☐ Other: _____

Special Instructions/QC Requirements & Comments:
Please report to:

Bob Tworkowski	btworkowski@tradepointatlantic.com
Matt Newman	mnewman@tradepointatlantic.com
Guy Davis	GDavis@armgroup.net
Doug Hamilton	DHamilton@armgroup.net

Sample Disposal:
- ☐ Return to Client
- ☒ Disposal by lab
- ☐ Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

27 July 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 07/19/21 16:10.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/27/21 15:21

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 6 MPE INF		1071910-01	Vapor	07/19/21 12:20	07/19/21 16:10

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/27/21 15:21

CELL 6 MPE INF

1071910-01 (Vapor)
Sample Date: 07/19/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	50.0	50.0	5	07/20/21	07/20/21 15:58	AS
tert-Amyl alcohol (TAA)	ND		ug/L	100	100	5	07/20/21	07/20/21 15:58	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Benzene	**763**		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Bromobenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Bromochloromethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Bromodichloromethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Bromoform	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Bromomethane	ND		ug/L	25.0	25.0	5	07/20/21	07/20/21 15:58	AS
tert-Butanol (TBA)	ND		ug/L	75.0	75.0	5	07/20/21	07/20/21 15:58	AS
2-Butanone (MEK)	ND		ug/L	50.0	50.0	5	07/20/21	07/20/21 15:58	AS
n-Butylbenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
sec-Butylbenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
tert-Butylbenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Carbon disulfide	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Carbon tetrachloride	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Chlorobenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Chloroethane	ND		ug/L	25.0	25.0	5	07/20/21	07/20/21 15:58	AS
Chloroform	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Chloromethane	ND		ug/L	25.0	25.0	5	07/20/21	07/20/21 15:58	AS
2-Chlorotoluene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
4-Chlorotoluene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Dibromochloromethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,2-Dibromoethane (EDB)	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Dibromomethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,2-Dichlorobenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,3-Dichlorobenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,4-Dichlorobenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Dichlorodifluoromethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,1-Dichloroethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,2-Dichloroethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/27/21 15:21

CELL 6 MPE INF

1071910-01 (Vapor)
Sample Date: 07/19/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
cis-1,2-Dichloroethene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
trans-1,2-Dichloroethene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Dichlorofluoromethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,2-Dichloropropane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,3-Dichloropropane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
2,2-Dichloropropane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,1-Dichloropropene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
cis-1,3-Dichloropropene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
trans-1,3-Dichloropropene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Diisopropyl ether (DIPE)	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Ethylbenzene	**28.5**		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Hexachlorobutadiene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
2-Hexanone	ND		ug/L	50.0	50.0	5	07/20/21	07/20/21 15:58	AS
Isopropylbenzene (Cumene)	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
4-Isopropyltoluene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
4-Methyl-2-pentanone	ND		ug/L	50.0	50.0	5	07/20/21	07/20/21 15:58	AS
Methylene chloride	ND		ug/L	50.0	50.0	5	07/20/21	07/20/21 15:58	AS
Naphthalene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
n-Propylbenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Styrene	**9.55**	J	ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Tetrachloroethene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Toluene	**605**		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,2,3-Trichlorobenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,2,4-Trichlorobenzene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,1,1-Trichloroethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,1,2-Trichloroethane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Trichloroethene	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/27/21 15:21

CELL 6 MPE INF

1071910-01 (Vapor)
Sample Date: 07/19/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,2,4-Trimethylbenzene	**6.50**	J	ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
1,3,5-Trimethylbenzene	**5.65**	J	ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Vinyl chloride	ND		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
o-Xylene	**28.8**		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
m- & p-Xylenes	**116**		ug/L	10.0	5.00	5	07/20/21	07/20/21 15:58	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*07/20/21*		*07/20/21 15:58*		
Surrogate: Toluene-d8			*75-120*	*101 %*	*07/20/21*		*07/20/21 15:58*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*100 %*	*07/20/21*		*07/20/21 15:58*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/27/21 15:21

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/27/21 15:21

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
07/27/21 15:21

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260								Preservative	Field Notes	MSS Lab ID
CELL 6 MPE INF	7/19/21	1220				X	1	X										10719 10-01

Analysis Requested

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*
(Printed) Guy L Davis	7/19/21 1610	*(Printed)*	*(Printed)*		*(Printed)*
Relinquished by: *(Signature)*	Date/Time	Received by Lab: *(Signature)*			
(Printed)	16:10 7-19-21	*(Printed)* Lori Foster			

Turn Around Time:

- ☐ Normal (7 day)
- ☐ 5 day
- ☐ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:

Temp: _____ °C

- ☐ Received on Ice
- ☒ Received same day

Delivery Method:

- ☒ Courier
- ☐ Client
- ☐ UPS
- ☐ FedEx
- ☐ USPS
- ☐ Other: _____

Special Instructions/QC Requirements & Comments:

Please report to:

Bob Tworkowski	btworkowski@tradepointatlantic.com
Matt Newman	mnewman@tradepointatlantic.com
Guy Davis	GDavis@armgroup.net
Doug Hamilton	DHamilton@armgroup.net

Sample Disposal:

- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

11 August 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 08/04/21 10:10.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

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

Sincerely,



Rabecka Koons
Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 3 SVE INF		1080402-01	Vapor	08/04/21 08:30	08/04/21 10:10
CELL 1 SVE INF		1080402-02	Vapor	08/04/21 09:00	08/04/21 10:10
CELL 5 DPE INF		1080402-03	Vapor	08/04/21 09:10	08/04/21 10:10

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

CELL 3 SVE INF

1080402-01 (Vapor)
Sample Date: 08/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 13:50	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	08/04/21	08/04/21 13:50	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Benzene	**0.63**		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	08/04/21	08/04/21 13:50	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	08/04/21	08/04/21 13:50	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 13:50	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	08/04/21	08/04/21 13:50	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	08/04/21	08/04/21 13:50	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

CELL 3 SVE INF

1080402-01 (Vapor)
Sample Date: 08/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 13:50	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 13:50	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 13:50	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Styrene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Toluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

CELL 3 SVE INF

1080402-01 (Vapor)
Sample Date: 08/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
Trichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
m- & p-Xylenes	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 13:50	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*			*08/04/21*	*08/04/21 13:50*	
Surrogate: Toluene-d8			*75-120*	*102 %*			*08/04/21*	*08/04/21 13:50*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*95 %*			*08/04/21*	*08/04/21 13:50*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

CELL 1 SVE INF

1080402-02 (Vapor)
Sample Date: 08/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 15:53	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	08/04/21	08/04/21 15:53	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Benzene	**0.25**		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	08/04/21	08/04/21 15:53	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	08/04/21	08/04/21 15:53	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 15:53	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	08/04/21	08/04/21 15:53	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	08/04/21	08/04/21 15:53	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS

Rebecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

CELL 1 SVE INF

1080402-02 (Vapor)
Sample Date: 08/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 15:53	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 15:53	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 15:53	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Styrene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Toluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS



Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

CELL 1 SVE INF

1080402-02 (Vapor)
Sample Date: 08/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
Trichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
m- & p-Xylenes	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 15:53	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*			*08/04/21*	*08/04/21 15:53*	
Surrogate: Toluene-d8			*75-120*	*97 %*			*08/04/21*	*08/04/21 15:53*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*94 %*			*08/04/21*	*08/04/21 15:53*	

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

CELL 5 DPE INF

1080402-03 (Vapor)
Sample Date: 08/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 14:39	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	08/04/21	08/04/21 14:39	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Benzene	**0.52**		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	08/04/21	08/04/21 14:39	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	08/04/21	08/04/21 14:39	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 14:39	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	08/04/21	08/04/21 14:39	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	08/04/21	08/04/21 14:39	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS

Rebecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

CELL 5 DPE INF

1080402-03 (Vapor)
Sample Date: 08/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 14:39	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 14:39	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	08/04/21	08/04/21 14:39	AS
Naphthalene	**0.11**	J	ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Styrene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Toluene	**0.30**		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS

Rebecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

CELL 5 DPE INF

1080402-03 (Vapor)
Sample Date: 08/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
Trichloroethene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
m- & p-Xylenes	**0.33**		ug/L	0.20	0.10	0.1	08/04/21	08/04/21 14:39	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*			*08/04/21*	*08/04/21 14:39*	
Surrogate: Toluene-d8			*75-120*	*98 %*			*08/04/21*	*08/04/21 14:39*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*96 %*			*08/04/21*	*08/04/21 14:39*	

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
08/11/21 15:32

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219	Analysis Requested	**CHAIN-OF-CUSTODY RECORD**
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046		Maryland Spectral Services, Inc. 1500 Caton Center Drive, Suite G Baltimore, MD 21227 410-247-7600 • Fax 410-247-7602 reporting@mdspectral.com
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com		Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 3 SVE INF	8/4/21	0830				X	1	X			10 80402-01
CELL 1 SVE INF		0900				X	1	X			-02
CELL 5 DPE INF	8/4/21	0910				X	1	X			-03

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*
(Printed)	8/4/21 1010	*(Printed)*	*(Printed)*		*(Printed)*
Relinquished by: *(Signature)*	Date/Time	Received by Lab: *(Signature)*			
(Printed)	10:10 8/4/21	*(Printed)* Lori Foster			

Delivery Method:
- ☒ Courier
- ☐ Client
- ☐ UPS
- ☐ FedEx
- ☐ USPS
- ☐ Other:_____

Special Instructions/QC Requirements & Comments:
Please report to:
- Bob Tworkowski btworkowski@tradepointatlantic.com
- Matt Newman mnewman@tradepointatlantic.com
- Guy Davis GDavis@armgroup.net
- Doug Hamilton DHamilton@armgroup.net

Turn Around Time:
- ☒ Normal (7 day)
- ☐ 5 day
- ☐ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Lab Use:
Temp: _____°C
- ☐ Received on Ice
- ☒ Received same day

Sample Disposal:
- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

09 September 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 09/01/21 09:30.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/09/21 16:39

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 3 SVE INF		1090102-01	Vapor	09/01/21 07:05	09/01/21 09:30
CELL 1 SVE INF		1090102-02	Vapor	09/01/21 07:35	09/01/21 09:30

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/09/21 16:39

CELL 3 SVE INF

1090102-01 (Vapor)
Sample Date: 09/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	09/01/21	09/01/21 13:23	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	09/01/21	09/01/21 13:23	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Benzene	**0.17**	J	ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	09/01/21	09/01/21 13:23	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	09/01/21	09/01/21 13:23	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	09/01/21	09/01/21 13:23	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	09/01/21	09/01/21 13:23	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	09/01/21	09/01/21 13:23	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/09/21 16:39

CELL 3 SVE INF

1090102-01 (Vapor)
Sample Date: 09/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	09/01/21	09/01/21 13:23	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	09/01/21	09/01/21 13:23	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	09/01/21	09/01/21 13:23	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Styrene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Toluene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/09/21 16:39

CELL 3 SVE INF

1090102-01 (Vapor)
Sample Date: 09/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
m- & p-Xylenes	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 13:23	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*09/01/21*		*09/01/21 13:23*		
Surrogate: Toluene-d8			*75-120*	*104 %*	*09/01/21*		*09/01/21 13:23*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*96 %*	*09/01/21*		*09/01/21 13:23*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/09/21 16:39

CELL 1 SVE INF

1090102-02 (Vapor)
Sample Date: 09/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	09/01/21	09/01/21 14:38	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	09/01/21	09/01/21 14:38	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Benzene	**6.07**		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	09/01/21	09/01/21 14:38	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	09/01/21	09/01/21 14:38	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	09/01/21	09/01/21 14:38	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	09/01/21	09/01/21 14:38	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	09/01/21	09/01/21 14:38	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/09/21 16:39

CELL 1 SVE INF

1090102-02 (Vapor)
Sample Date: 09/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	09/01/21	09/01/21 14:38	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	09/01/21	09/01/21 14:38	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	09/01/21	09/01/21 14:38	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Styrene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Toluene	**0.28**		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/09/21 16:39

CELL 1 SVE INF

1090102-02 (Vapor)
Sample Date: 09/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
m- & p-Xylenes	**0.11**	J	ug/L	0.20	0.10	0.1	09/01/21	09/01/21 14:38	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*			*09/01/21*	*09/01/21 14:38*	
Surrogate: Toluene-d8			*75-120*	*101 %*			*09/01/21*	*09/01/21 14:38*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*96 %*			*09/01/21*	*09/01/21 14:38*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/09/21 16:39

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/09/21 16:39

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/09/21 16:39

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point MD 21219
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 3 SVE INF	9/1/21	0705				X	1	X			1090102-01
CELL 1 SVE INF	9/1/21	0735				X	1	X			-02

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) Guy L. Davis	9/1/21/0915	(Printed)	(Printed)		(Printed)
Relinquished by: (Signature)	Date/Time 9:30 9/1/21	Received by Lab: (Signature) (Printed) Lori Foster			

Turn Around Time:
- [x] Normal (7 day)
- [ ] 5 day
- [ ] 4 day
- [ ] 3 day
- [ ] Rush (2 day)
- [ ] Next Day
- [ ] Other: _____
- [ ] Specific Due Date: _____

Lab Use:
Temp: ____ °C
- [ ] Received on Ice
- [x] Received same day

Delivery Method:
- [x] Courier
- [ ] Client
- [ ] UPS
- [ ] FedEx
- [ ] USPS
- [ ] Other: _____

Special Instructions/QC Requirements & Comments:
Please report to:

Bob Tworkowski	btworkowski@tradepointatlantic.com
Matt Newman	mnewman@tradepointatlantic.com
Guy Davis	GDavis@armgroup.net
Doug Hamilton	DHamilton@armgroup.net

Sample Disposal:
- [ ] Return to Client
- [x] Disposal by lab
- [ ] Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

22 September 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 09/14/21 10:20.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/22/21 12:41

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 5 DPE INF		1091401-01	Vapor	09/14/21 07:55	09/14/21 10:20

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/22/21 12:41

CELL 5 DPE INF

1091401-01 (Vapor)
Sample Date: 09/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	09/15/21	09/15/21 15:28	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	09/15/21	09/15/21 15:28	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Benzene	**0.75**		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	09/15/21	09/15/21 15:28	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	09/15/21	09/15/21 15:28	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	09/15/21	09/15/21 15:28	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	09/15/21	09/15/21 15:28	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	09/15/21	09/15/21 15:28	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/22/21 12:41

CELL 5 DPE INF

1091401-01 (Vapor)
Sample Date: 09/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	09/15/21	09/15/21 15:28	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	09/15/21	09/15/21 15:28	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	09/15/21	09/15/21 15:28	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Styrene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Toluene	**0.43**		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/22/21 12:41

CELL 5 DPE INF

1091401-01 (Vapor)
Sample Date: 09/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
o-Xylene	**0.16**	J	ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
m- & p-Xylenes	**0.53**		ug/L	0.20	0.10	0.1	09/15/21	09/15/21 15:28	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*			*09/15/21*	*09/15/21 15:28*	
Surrogate: Toluene-d8			*75-120*	*102 %*			*09/15/21*	*09/15/21 15:28*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*93 %*			*09/15/21*	*09/15/21 15:28*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/22/21 12:41

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/22/21 12:41

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
09/22/21 12:41

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219	Analysis Requested	**CHAIN-OF-CUSTODY RECORD**
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046		Maryland Spectral Services, Inc. 1500 Caton Center Drive, Suite G Baltimore, MD 21227 410-247-7600 • Fax 410-247-7602 reporting@mdspectral.com
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com		Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260								Preservative	Field Notes	MSS Lab ID
CELL 5 DPE INF	9/14/21	0755				X	1	X										1091401-01

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*
(Printed) Guy L Davis	9/14/21/ 1020	*(Printed)*	*(Printed)*		*(Printed)*
Relinquished by: *(Signature)*	Date/Time	Received by Lab: *(Signature)*	Turn Around Time:	Lab Use:	
(Printed)	10:20 9/14/21	*(Printed)* Lori Foster	☒ Normal (7 day) ☐ 5 day ☐ 4 day ☐ 3 day ☐ Rush (2 day) ☐ Next Day ☐ Other: _____ ☐ Specific Due Date: _____	Temp: _____ °C ☐ Received on Ice ☐ Received same day	

Delivery Method:	Special Instructions/QC Requirements & Comments:	Sample Disposal:
☒ Courier ☐ Client ☐ UPS ☐ FedEx ☐ USPS ☐ Other:_____	Please report to: Bob Tworkowski btworkowski@tradepointatlantic.com Matt Newman mnewman@tradepointatlantic.com Guy Davis GDavis@armgroup.net Doug Hamilton DHamilton@armgroup.net	☐ Return to Client ☒ Disposal by lab ☐ Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

13 October 2021

Matthew Newman
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 10/04/21 10:30.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 5 DPE INF		1100403-01	Vapor	10/04/21 06:15	10/04/21 10:30
CELL 1 SVE INF		1100403-02	Vapor	10/04/21 06:45	10/04/21 10:30
CELL 3 SVE INF		1100403-03	Vapor	10/04/21 07:05	10/04/21 10:30

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

CELL 5 DPE INF

1100403-01 (Vapor)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 14:36	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	10/04/21	10/04/21 14:36	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Benzene	**0.97**		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	10/04/21	10/04/21 14:36	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	10/04/21	10/04/21 14:36	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 14:36	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	10/04/21	10/04/21 14:36	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	10/04/21	10/04/21 14:36	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

CELL 5 DPE INF

1100403-01 (Vapor)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 14:36	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 14:36	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 14:36	AS
Naphthalene	**0.13**	J	ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Styrene	**0.11**	J	ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Toluene	**0.54**		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

CELL 5 DPE INF

1100403-01 (Vapor)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,2,4-Trimethylbenzene	**0.12**	J	ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
o-Xylene	**0.19**	J	ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
m- & p-Xylenes	**0.66**		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 14:36	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*			*10/04/21*	*10/04/21 14:36*	
Surrogate: Toluene-d8			*75-120*	*98 %*			*10/04/21*	*10/04/21 14:36*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*98 %*			*10/04/21*	*10/04/21 14:36*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

CELL 1 SVE INF

1100403-02 (Vapor)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 15:01	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	10/04/21	10/04/21 15:01	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Benzene	**2.21**		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	10/04/21	10/04/21 15:01	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	10/04/21	10/04/21 15:01	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 15:01	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	10/04/21	10/04/21 15:01	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	10/04/21	10/04/21 15:01	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

CELL 1 SVE INF

1100403-02 (Vapor)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 15:01	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 15:01	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 15:01	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Styrene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Toluene	**0.11**	J	ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

CELL 1 SVE INF

1100403-02 (Vapor)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
m- & p-Xylenes	**0.13**	J	ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:01	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*		*10/04/21*		*10/04/21 15:01*	
Surrogate: Toluene-d8			*75-120*	*98 %*		*10/04/21*		*10/04/21 15:01*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*98 %*		*10/04/21*		*10/04/21 15:01*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

CELL 3 SVE INF

1100403-03 (Vapor)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 15:26	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	10/04/21	10/04/21 15:26	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Benzene	**1.28**		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	10/04/21	10/04/21 15:26	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	10/04/21	10/04/21 15:26	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 15:26	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	10/04/21	10/04/21 15:26	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	10/04/21	10/04/21 15:26	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

CELL 3 SVE INF

1100403-03 (Vapor)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 15:26	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 15:26	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	10/04/21	10/04/21 15:26	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Styrene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Toluene	**0.15**	J	ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

CELL 3 SVE INF

1100403-03 (Vapor)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
m- & p-Xylenes	ND		ug/L	0.20	0.10	0.1	10/04/21	10/04/21 15:26	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*			*10/04/21*	*10/04/21 15:26*	
Surrogate: Toluene-d8			*75-120*	*99 %*			*10/04/21*	*10/04/21 15:26*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*			*10/04/21*	*10/04/21 15:26*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Matthew Newman

Reported:
10/13/21 08:45

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219
Project Name: Sparrows Point IM	Project Manager: Matt Newman (443) 791-9046
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 5 DPE INF	10/4/21	0615				X	1	X			1100403-01
CELL 1 SVE INF	↓	0645				X	1	X			-02
CELL 3 SVE INF	10/4/21	0705				X	1	X			-03

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*
(Printed) Guy L. Davis	10/4/21 1030	*(Printed)*	*(Printed)*		*(Printed)*
Relinquished by: *(Signature)*	Date/Time	Received by Lab: *(Signature)*			
(Printed)	10:30 10/4/21	*(Printed)* Lori Foster			

Turn Around Time:
- [X] Normal (7 day)
- [ ] 5 day
- [ ] 4 day
- [ ] 3 day
- [ ] Rush (2 day)
- [ ] Next Day
- [ ] Other: _____
- [ ] Specific Due Date: _____

Lab Use:
Temp: ____°C
- [ ] Received on Ice
- [ ] Received same day

Delivery Method:
- [X] Courier
- [ ] Client
- [ ] UPS
- [ ] FedEx
- [ ] USPS
- [ ] Other:_____

Special Instructions/QC Requirements & Comments:
Please report to:
Bob Tworkowski btworkowski@tradepointatlantic.com
Matt Newman mnewman@tradepointatlantic.com
Guy Davis GDavis@armgroup.net
Doug Hamilton DHamilton@armgroup.net

Sample Disposal:
- [ ] Return to Client
- [X] Disposal by lab
- [ ] Archive for _____ days

MSS-F001-004

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

09 November 2021

Bob Tworkowski
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 11/01/21 11:43.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
11/09/21 14:39

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 1 SVE INF		1110104-01	Vapor	11/01/21 07:20	11/01/21 11:43
CELL 5 DPE INF		1110104-02	Vapor	11/01/21 07:50	11/01/21 11:43

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
11/09/21 14:39

CELL 1 SVE INF

1110104-01 (Vapor)
Sample Date: 11/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	11/02/21	11/02/21 13:33	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	11/02/21	11/02/21 13:33	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Benzene	**3.05**		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	11/02/21	11/02/21 13:33	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	11/02/21	11/02/21 13:33	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	11/02/21	11/02/21 13:33	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	11/02/21	11/02/21 13:33	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	11/02/21	11/02/21 13:33	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
11/09/21 14:39

CELL 1 SVE INF

1110104-01 (Vapor)
Sample Date: 11/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	11/02/21	11/02/21 13:33	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	11/02/21	11/02/21 13:33	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	11/02/21	11/02/21 13:33	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Styrene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Toluene	**0.10**	J	ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
11/09/21 14:39

CELL 1 SVE INF

1110104-01 (Vapor)
Sample Date: 11/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
o-Xylene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
m- & p-Xylenes	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:33	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/02/21*		*11/02/21 13:33*		
Surrogate: Toluene-d8			*75-120*	*95 %*	*11/02/21*		*11/02/21 13:33*		
Surrogate: 4-Bromofluorobenzene			*65-120*	*100 %*	*11/02/21*		*11/02/21 13:33*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
11/09/21 14:39

CELL 5 DPE INF

1110104-02 (Vapor)
Sample Date: 11/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	11/02/21	11/02/21 13:58	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	11/02/21	11/02/21 13:58	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Benzene	**1.04**		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	11/02/21	11/02/21 13:58	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	11/02/21	11/02/21 13:58	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	11/02/21	11/02/21 13:58	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	11/02/21	11/02/21 13:58	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	11/02/21	11/02/21 13:58	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
11/09/21 14:39

CELL 5 DPE INF

1110104-02 (Vapor)
Sample Date: 11/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	11/02/21	11/02/21 13:58	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	11/02/21	11/02/21 13:58	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	11/02/21	11/02/21 13:58	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Styrene	**0.11**	J	ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Toluene	**0.60**		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
11/09/21 14:39

CELL 5 DPE INF

1110104-02 (Vapor)
Sample Date: 11/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,2,4-Trimethylbenzene	**0.11**	J	ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
o-Xylene	**0.20**	J	ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
m- & p-Xylenes	**0.66**		ug/L	0.20	0.10	0.1	11/02/21	11/02/21 13:58	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*			*11/02/21*	*11/02/21 13:58*	
Surrogate: Toluene-d8			*75-120*	*95 %*			*11/02/21*	*11/02/21 13:58*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*101 %*			*11/02/21*	*11/02/21 13:58*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
11/09/21 14:39

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
11/09/21 14:39

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
11/09/21 14:39

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

CHAIN-OF-CUSTODY RECORD

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd, Sparrows Point, MD 21219
Project Name: Sparrows Point IM	Project Manager: Bob Tworkowski (443) 649-5073
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7602
reporting@mdspectral.com

Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 1 SVE INF	11/1/21	0720				X	1	X			111014-01
CELL 5 DPE INF	11/1/21	0750				X	1	X			-02

Analysis Requested

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*
(Printed) Guy L Davis	11/1/21 1145	*(Printed)*	*(Printed)*		*(Printed)*
Relinquished by: *(Signature)*	Date/Time	Received by Lab: *(Signature)*			
(Printed)	11:43 11/1/21	*(Printed)* Lori Foster			

Turn Around Time:
- [x] Normal (7 day)
- [ ] 5 day
- [ ] 4 day
- [ ] 3 day
- [ ] Rush (2 day)
- [ ] Next Day
- [ ] Other: _____
- [ ] Specific Due Date: _____

Lab Use:
Temp: ___ °C
- [ ] Received on Ice
- [x] Received same day

Delivery Method:
- [x] Courier
- [ ] Client
- [ ] UPS
- [ ] FedEx
- [ ] USPS
- [ ] Other: _____

Special Instructions/QC Requirements & Comments:
Please report to:

Bob Tworkowski	btworkowski@tradepointatlantic.com
Matt Newman	mnewman@tradepointatlantic.com
Guy Davis	GDavis@armgroup.net
Doug Hamilton	DHamilton@armgroup.net

Sample Disposal:
- [ ] Return to Client
- [x] Disposal by lab
- [ ] Archive for _____ days

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

09 December 2021

Bob Tworkowski
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, MD 21219
RE: SPARROWS POINT IM

Enclosed are the results of analyses for samples received by the laboratory on 12/01/21 09:35.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

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

Sincerely,



Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
12/09/21 09:04

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 1 SVE INF		1120101-01	Vapor	12/01/21 07:25	12/01/21 09:35
CELL 5 DPE INF		1120101-02	Vapor	12/01/21 08:10	12/01/21 09:35

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
12/09/21 09:04

CELL 1 SVE INF

1120101-01 (Vapor)
Sample Date: 12/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	12/03/21	12/03/21 12:22	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	12/03/21	12/03/21 12:22	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Benzene	**1.04**		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	12/03/21	12/03/21 12:22	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	12/03/21	12/03/21 12:22	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	12/03/21	12/03/21 12:22	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	12/03/21	12/03/21 12:22	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	12/03/21	12/03/21 12:22	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
12/09/21 09:04

CELL 1 SVE INF

1120101-01 (Vapor)
Sample Date: 12/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	12/03/21	12/03/21 12:22	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	12/03/21	12/03/21 12:22	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	12/03/21	12/03/21 12:22	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Styrene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Toluene	**0.47**		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
12/09/21 09:04

CELL 1 SVE INF

1120101-01 (Vapor)
Sample Date: 12/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
o-Xylene	**0.29**		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
m- & p-Xylenes	**0.47**		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:22	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*94 %*			*12/03/21*	*12/03/21 12:22*	
Surrogate: Toluene-d8			*75-120*	*94 %*			*12/03/21*	*12/03/21 12:22*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*			*12/03/21*	*12/03/21 12:22*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
12/09/21 09:04

CELL 5 DPE INF

1120101-02 (Vapor)
Sample Date: 12/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES									
Acetone	ND		ug/L	1.00	1.00	0.1	12/03/21	12/03/21 12:47	AS
tert-Amyl alcohol (TAA)	ND		ug/L	2.00	2.00	0.1	12/03/21	12/03/21 12:47	AS
tert-Amyl ethyl ether (TAEE)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
tert-Amyl methyl ether (TAME)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Benzene	**0.94**		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Bromobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Bromochloromethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Bromodichloromethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Bromoform	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Bromomethane	ND		ug/L	0.50	0.50	0.1	12/03/21	12/03/21 12:47	AS
tert-Butanol (TBA)	ND		ug/L	1.50	1.50	0.1	12/03/21	12/03/21 12:47	AS
2-Butanone (MEK)	ND		ug/L	1.00	1.00	0.1	12/03/21	12/03/21 12:47	AS
n-Butylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
sec-Butylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
tert-Butylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Carbon disulfide	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Carbon tetrachloride	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Chlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Chloroethane	ND		ug/L	0.50	0.50	0.1	12/03/21	12/03/21 12:47	AS
Chloroform	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Chloromethane	ND		ug/L	0.50	0.50	0.1	12/03/21	12/03/21 12:47	AS
2-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
4-Chlorotoluene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Dibromochloromethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,2-Dibromoethane (EDB)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Dibromomethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,2-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,3-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,4-Dichlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Dichlorodifluoromethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,1-Dichloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,2-Dichloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
12/09/21 09:04

CELL 5 DPE INF

1120101-02 (Vapor)
Sample Date: 12/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,1-Dichloroethene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
cis-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
trans-1,2-Dichloroethene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Dichlorofluoromethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,3-Dichloropropane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
2,2-Dichloropropane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,1-Dichloropropene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
cis-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
trans-1,3-Dichloropropene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Diisopropyl ether (DIPE)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Ethyl tert-butyl ether (ETBE)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Ethylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Hexachlorobutadiene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
2-Hexanone	ND		ug/L	1.00	1.00	0.1	12/03/21	12/03/21 12:47	AS
Isopropylbenzene (Cumene)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
4-Isopropyltoluene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
4-Methyl-2-pentanone	ND		ug/L	1.00	1.00	0.1	12/03/21	12/03/21 12:47	AS
Methylene chloride	ND		ug/L	1.00	1.00	0.1	12/03/21	12/03/21 12:47	AS
Naphthalene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
n-Propylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Styrene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Tetrachloroethene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Toluene	**0.53**		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,1,1-Trichloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,1,2-Trichloroethane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Trichloroethene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
12/09/21 09:04

CELL 5 DPE INF

1120101-02 (Vapor)
Sample Date: 12/01/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-VAPOR-VOLATILES (continued)									
1,2,3-Trichloropropane	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Vinyl chloride	ND		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
o-Xylene	**0.17**	J	ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
m- & p-Xylenes	**0.58**		ug/L	0.20	0.10	0.1	12/03/21	12/03/21 12:47	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*91 %*			*12/03/21*	*12/03/21 12:47*	
Surrogate: Toluene-d8			*75-120*	*95 %*			*12/03/21*	*12/03/21 12:47*	
Surrogate: 4-Bromofluorobenzene			*65-120*	*97 %*			*12/03/21*	*12/03/21 12:47*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
12/09/21 09:04

Maryland Spectral Services does not maintain certification for the following analytical parameters:

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | Acetone
Vapor | 8260 (Full List) | tert-Amyl alcohol (TAA)
Vapor | 8260 (Full List) | tert-Amyl ethyl ether (TAEE)
Vapor | 8260 (Full List) | tert-Amyl methyl ether (TAME)
Vapor | 8260 (Full List) | Benzene
Vapor | 8260 (Full List) | Bromobenzene
Vapor | 8260 (Full List) | Bromochloromethane
Vapor | 8260 (Full List) | Bromodichloromethane
Vapor | 8260 (Full List) | Bromoform
Vapor | 8260 (Full List) | Bromomethane
Vapor | 8260 (Full List) | tert-Butanol (TBA)
Vapor | 8260 (Full List) | 2-Butanone (MEK)
Vapor | 8260 (Full List) | n-Butylbenzene
Vapor | 8260 (Full List) | sec-Butylbenzene
Vapor | 8260 (Full List) | tert-Butylbenzene
Vapor | 8260 (Full List) | Carbon disulfide
Vapor | 8260 (Full List) | Carbon tetrachloride
Vapor | 8260 (Full List) | Chlorobenzene
Vapor | 8260 (Full List) | Chloroethane
Vapor | 8260 (Full List) | Chloroform
Vapor | 8260 (Full List) | Chloromethane
Vapor | 8260 (Full List) | 2-Chlorotoluene
Vapor | 8260 (Full List) | 4-Chlorotoluene
Vapor | 8260 (Full List) | 1,2-Dibromo-3-chloropropane
Vapor | 8260 (Full List) | Dibromochloromethane
Vapor | 8260 (Full List) | 1,2-Dibromoethane (EDB)
Vapor | 8260 (Full List) | Dibromomethane
Vapor | 8260 (Full List) | 1,2-Dichlorobenzene
Vapor | 8260 (Full List) | 1,3-Dichlorobenzene
Vapor | 8260 (Full List) | 1,4-Dichlorobenzene
Vapor | 8260 (Full List) | Dichlorodifluoromethane
Vapor | 8260 (Full List) | 1,1-Dichloroethane
Vapor | 8260 (Full List) | 1,2-Dichloroethane
Vapor | 8260 (Full List) | 1,1-Dichloroethene
Vapor | 8260 (Full List) | cis-1,2-Dichloroethene
Vapor | 8260 (Full List) | trans-1,2-Dichloroethene
Vapor | 8260 (Full List) | Dichlorofluoromethane
Vapor | 8260 (Full List) | 1,2-Dichloropropane
Vapor | 8260 (Full List) | 1,3-Dichloropropane
Vapor | 8260 (Full List) | 2,2-Dichloropropane
Vapor | 8260 (Full List) | 1,1-Dichloropropene
Vapor | 8260 (Full List) | cis-1,3-Dichloropropene
Vapor | 8260 (Full List) | trans-1,3-Dichloropropene
Vapor | 8260 (Full List) | Diisopropyl ether (DIPE)
Vapor | 8260 (Full List) | Ethyl tert-butyl ether (ETBE)
Vapor | 8260 (Full List) | Ethylbenzene
Vapor | 8260 (Full List) | Hexachlorobutadiene
Vapor | 8260 (Full List) | 2-Hexanone
Vapor | 8260 (Full List) | Isopropylbenzene (Cumene)
Vapor | 8260 (Full List) | 4-Isopropyltoluene
Vapor | 8260 (Full List) | Methyl tert-butyl ether (MTBE)
Vapor | 8260 (Full List) | 4-Methyl-2-pentanone
Vapor | 8260 (Full List) | Methylene chloride
Vapor | 8260 (Full List) | Naphthalene
Vapor | 8260 (Full List) | n-Propylbenzene
Vapor | 8260 (Full List) | Styrene
Vapor | 8260 (Full List) | 1,1,1,2-Tetrachloroethane
Vapor | 8260 (Full List) | 1,1,2,2-Tetrachloroethane
Vapor | 8260 (Full List) | Tetrachloroethene
Vapor | 8260 (Full List) | Toluene
Vapor | 8260 (Full List) | 1,2,3-Trichlorobenzene
Vapor | 8260 (Full List) | 1,2,4-Trichlorobenzene
Vapor | 8260 (Full List) | 1,1,1-Trichloroethane
Vapor | 8260 (Full List) | 1,1,2-Trichloroethane
Vapor | 8260 (Full List) | Trichloroethene
Vapor | 8260 (Full List) | Trichlorofluoromethane (Freon 11)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
12/09/21 09:04

Maryland Spectral Services

Matrix , Method , Analyte

Vapor | 8260 (Full List) | 1,2,3-Trichloropropane
Vapor | 8260 (Full List) | 1,2,4-Trimethylbenzene
Vapor | 8260 (Full List) | 1,3,5-Trimethylbenzene
Vapor | 8260 (Full List) | Vinyl chloride
Vapor | 8260 (Full List) | o-Xylene
Vapor | 8260 (Full List) | m- & p-Xylenes

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: SPARROWS POINT IM

Project Number: [none]
Project Manager: Bob Tworkowski

Reported:
12/09/21 09:04

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Company Name: Tradepoint Atlantic	Company Address: 1600 Sparrows Point Blvd Sparrows Point, MD 21219	Analysis Requested	**CHAIN-OF-CUSTODY RECORD**
Project Name: Sparrows Point IM	Project Manager: Bob Tworkowski (443) 649-5073		Maryland Spectral Services, Inc. 1500 Caton Center Drive, Suite G Baltimore, MD 21227 410–247–7600 • Fax 410–247–7602 reporting@mdspectral.com
Sampler(s): Guy Davis/ARM Group (443) 610-0211	Attention/Invoice: ap@tradepointatlantic.com		Matrix Codes: NW (non-potable water), DW (drinking water), SV (soil vapor)

Field Sample ID	Date	Time	DW	Water	Soil	SV	No. of Containers	FULL SUITE VOCs + NAPHTHALENE 8260	Preservative	Field Notes	MSS Lab ID
CELL 1 SVE INF	12/1/21	0725				X	1	X			1120101-01
CELL 5 DPE INF	12/1/21	0810				X	1	X			-02

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*
(Printed) Guy L Davis	12/1/21 0935	*(Printed)*	*(Printed)*		*(Printed)*
Relinquished by: *(Signature)*	Date/Time	Received by Lab: *(Signature)*	Turn Around Time:	Lab Use:	
(Printed)	9:35 12/1/21	*(Printed)* Lori Foster	☒ Normal (7 day) ☐ 5 day ☐ 4 day ☐ 3 day ☐ Rush (2 day) ☐ Next Day ☐ Other: _____ ☐ Specific Due Date: _____	Temp: _____ °C ☐ Received on Ice ☑ Received same day	

Delivery Method:	Special Instructions/QC Requirements & Comments:	Sample Disposal:
☒ Courier ☐ Client ☐ UPS ☐ FedEx ☐ USPS ☐ Other:_____	Please report to: Bob Tworkowski btworkowski@tradepointatlantic.com Matt Newman mnewman@tradepointatlantic.com Guy Davis GDavis@armgroup.net Doug Hamilton DHamilton@armgroup.net	☐ Return to Client ☒ Disposal by lab ☐ Archive for _____ days

APPENDIX B

Monitoring Well Purge Logs

Quarter 1 2021

Low Flow Sampling
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 20010210
Well Number: C023-PZM008	Date: 3/10/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 14.93	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 22.12	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
1344	0.0	14.93	22.61	14.00	5.66		-421	8.69	
1349	0.45	14.93	22.32	10.39	4.29		-426	5.97	
1354	0.90	14.93	21.90	10.24	2.60		-141	4.49	
1359	1.35	14.93	21.51	10.15	2.21		-127	4.10	
1404	1.80	14.93	21.02	10.15	2.09		-109	3.86	
1409	2.25	14.93	20.76	10.14	2.07		-101	3.59	
1414	2.70	14.93	20.34	10.12	2.06		-93	3.44	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C023-PZM008	1420	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: 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.

Project Name: COA GW	Project Number: 200020
Well Number: C024-PZM007	Date: 3/10/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 14.55	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 22.14	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
1302	0.0	14.55	23.15	9.56	1.17		-83	5.45	
1307	0.45	14.55	22.85	9.70	1.15		-135	4.97	
1312	0.90	14.55	22.61	9.69	1.15		-169	4.53	
1317	1.35	14.55	22.46	9.67	1.16		-177	4.16	
1322	1.80	14.55	22.38	9.67	1.17		-181	3.93	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C024-PZM007	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	
		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: 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
Permanent Wells

ARM Group Inc.

Project Name:	COA GW	Project Number:	20010210
Well Number:	CO26-PZM007	Date:	3/11/21
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	11.95	Flow Rate (mL/min)	379
Product Thickness (ft):	N/A	Length of time Purged (min)	30
Depth to Bottom (ft):	19.31	Condition of Pad/Cover:	poor / 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
911	0.0	11.95	15.66	9.00	0.491		-17	41.0	
916	0.5	13.07	15.85	9.04	0.481		-33	29.7	
921	1.0	14.94	16.06	9.30	0.528		-80	14.1	
926	1.5	15.10	16.33	9.52	0.586		-112	11.7	
931	2.0	15.99	17.00	9.79	0.566		-140	9.91	
936	2.5	16.22	17.38	10.02	0.587		-153	8.83	
941	3.0	17.90	18.03	10.39	0.619		-171	7.33	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO26-PZM007	950	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: 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.

Project Name: COA GW	Project Number: 20010210
Well Number: C027-PZM012	Date: 3/9/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 4.91	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 12.5	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
1148	0.0	4.91	19.33	9.94	0.847		-258	9.52	
1153	0.45	4.91	19.32	10.66	0.882		-262	9.11	
1158	6.90	4.91	18.81	10.93	0.889		-292	8.43	
1203	1.35	4.91	18.94	11.04	0.913		-283	6.94	
1208	1.80	4.91	19.17	11.10	0.918		-273	5.30	
1213	2.25	4.91	19.23	11.17	0.904		-280	4.94	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C027-PZM012	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: 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
Permanent Wells

ARM Group Inc.

Project Name:	COA GW	Project Number:	20010210
Well Number:	C027-PZM046	Date:	3/9/21
Well Diameter (in):	2	One Well Volume (gal):	
Depth to Product (ft):	NA	QED Controller Settings:	
Depth to Water (ft):	8.08	Flow Rate (mL/min)	379
Product Thickness (ft):	NA	Length of time Purged (min)	20
Depth to Bottom (ft):	51	Condition of Pad/Cover:	good/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
1117	0.0	8.08	18.85	7.74	0.800		-181	22.1	
1122	0.5	8.10	19.07	7.86	0.806		-200	15.8	
1127	1.0	8.14	19.26	8.01	0.782		-207	6.02	
1132	1.5	8.16	19.42	8.04	0.793		-207	5.56	
1137	2.0	8.17	19.29	8.02	0.784		-200	5.22	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C027-PZM046	1140	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: 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
Permanent Wells

ARM Group Inc.

Project Name:	COA GW	Project Number:	20010210
Well Number:	C030-PZMW15	Date:	3/11/21
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	~ 12.32	Flow Rate (mL/min)	341
Product Thickness (ft):	NA	Length of time Purged (min)	15
Depth to Bottom (ft):	27.64	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
1149	0.0	12.32	17.60	12.03	2.34		-190	10.87	
1154	0.45	12.32	17.95	12.14	2.39		-254	9.91	
1159	0.90	12.32	18.35	12.16	2.38		-263	9.05	
1204	1.35	12.32	18.84	12.17	2.37		-268	8.39	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C030-PZMW15	1210	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 20010210
Well Number: C036-PZMW08	Date: 3/9/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NF	QED Controller Settings:
Depth to Water (ft): 7.03	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 15
Depth to Bottom (ft): 14.20	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
812	0.0	7.03	20.22	7.55	0.659		125	7.47	
817	0.45	7.23	18.91	7.43	0.671		135	4.88	
822	0.90	7.30	17.82	7.40	0.674		140	3.22	
827	1.35	7.40	16.98	7.33	0.680		145	2.64	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C036-PZMW08	835	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: 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.

Project Name: COA GW	Project Number: 20010210
Well Number: C036-PZM043	Date: 3/9/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 7.89	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 52	Condition of Pad/Cover: OL / 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
847	0.0	7.89	15.49	9.29	0.900		80	3.38	
852	0.4	7.89	14.95	8.93	0.626		83	3.11	
857	0.8	7.89	14.55	8.81	0.636		89	2.90	
912	1.2	7.89	14.19	8.69	0.654		91	2.75	
917	1.6	7.89	13.99	8.63	0.652		91	2.51	
922	2.0	7.89	13.83	8.54	0.658		92	2.43	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C036-PZM043	925	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: UP

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.

Project Name: COA GW	Project Number: 20010216
Well Number: C037-PZM038	Date: 3/9/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 12.43	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 29.90	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
1422	0.0	12.43	20.38	8.99	0.475		-128	8.61	
1427	0.4	12.44	20.34	8.92	0.471		-122	6.04	
1432	0.8	12.46	20.31	8.85	0.468		-117	4.98	
1437	1.2	12.46	20.21	8.77	0.466		-109	3.87	
1442	1.6	12.47	20.17	8.72	0.466		-105	2.95	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C037-PZM038	1450	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 20010210
Well Number: C038 - PZM 006	Date: 3/9/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 6.57	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 15.18	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
948	0.0	6.57	13.46	10.17	1.80		-303	36.3	
953	0.5	6.57	13.61	10.29	1.81		-337	10.12	
958	1.0	6.57	13.89	10.27	1.81		-352	6.17	
1003	1.5	6.57	14.23	10.27	1.81		-360	5.80	
1008	2.0	6.57	14.76	10.28	1.80		-368	5.14	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C038-PZM006	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: UP

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.

Project Name: COA GW	Project Number: 20010210
Well Number: C038-PZ~~MW~~43	Date: 3/9/24
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 7.40	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 49.50	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
1030	0.0	7.40	15.95	8.61	0.903		-214	12.63	
1035	0.45	7.61	16.30	7.98	0.894		-215	10.08	
1040	0.90	7.82	16.47	7.85	0.883		-201	9.63	
1045	1.35	8.02	16.58	7.79	0.877		-196	9.47	
1050	1.80	8.15	16.75	7.70	0.874		-188	9.09	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C038-PZ~~MW~~043	1100	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: UP

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.

Project Name: COA GW	Project Number: 20010210
Well Number: C039-PZM007	Date: 3/9/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 6.54	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 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
1331	0.0	6.54	21.05	10.88	1.91		-288	26.7	
1336	0.45	6.55	21.23	10.45	1.86		-226	12.9	
1341	0.90	6.57	21.20	10.12	1.84		-293	8.63	
1346	1.35	6.58	21.01	10.00	1.81		-307	8.49	
1351	1.80	6.60	20.79	9.95	1.80		-301	8.11	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C039-PZM007	1400	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: 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.

Project Name:	COA GW	Project Number:	20010210
Well Number:	C039-P2M042	Date:	3/9/21
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	8.45	Flow Rate (mL/min)	303
Product Thickness (ft):	NA	Length of time Purged (min)	25
Depth to Bottom (ft):	47'	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
1246	0.0	8.45	20.38	11.42	1.75		-314	9.50	
1251	0.4	8.45	20.58	10.93	1.78		-355	6.32	
1256	0.8	8.45	20.67	10.77	1.77		-322	4.95	
1301	1.2	8.45	20.72	10.70	1.77		-330	3.69	
1306	1.6	8.45	20.77	10.61	1.77		-334	3.05	
1311	2.0	8.45	20.85	10.53	1.77		-327	2.32	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C039-P2M042	1315	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: 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.

Project Name:	COA GW	Project Number:	20010210
Well Number:	C040-PZM008	Date:	3/10/21
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	6.62	Flow Rate (mL/min)	341
Product Thickness (ft):	NA	Length of time Purged (min)	30
Depth to Bottom (ft):	17.75	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
816	0.0	6.62	20.20	6.04	1.61	0.0	151	30.2	
821	0.45	6.66	19.45	6.42	1.61		-6	22.1	
826	0.90	6.68	18.67	7.08	1.61		-60	18.5	
831	1.35	6.69	18.14	7.23	1.63		-103	17.2	
836	1.80	6.71	17.60	7.01	1.65		-140	16.5	
841	2.25	6.72	17.12	6.95	1.68		-169	15.3	
846	2.70	6.77	16.96	6.91	1.69		-182	14.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C040-PZM008	850	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: 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.

Project Name:	CoA GW	Project Number:	2001021.0
Well Number:	C041-PZM001	Date:	3/10/21
Well Diameter (in):	2	One Well Volume (gal):	
Depth to Product (ft):	NA	QED Controller Settings:	
Depth to Water (ft):	12.65	Flow Rate (mL/min)	304
Product Thickness (ft):	NA	Length of time Purged (min)	20
Depth to Bottom (ft):	16.00	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
1102	0.0	12.65	14.39	8.02	0.968		-232	5.86	
1107	0.4	12.65	14.22	7.84	0.916		-202	4.92	
1112	0.8	12.65	14.07	7.76	0.892		-168	4.16	
1117	1.2	12.65	13.94	7.79	0.898		-166	3.38	
1122	1.6	12.65	13.82	7.74	0.905		-158	3.15	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C041-PZM001	1125	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: 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.

Project Name: COA GW	Project Number: 2001210
Well Number: C041-PZM036	Date: 3/10/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 13.97	Flow Rate (mL/min) 304
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 51.10	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
952	0.0	13.97	14.03	11.29	1.43		-311	6.65	
957	0.4	13.97	14.09	11.33	1.46		-360	4.90	
1002	0.8	13.98	14.23	11.34	1.47		-378	3.41	
1007	1.2	13.98	14.31	11.34	1.48		-384	2.87	
1012	1.6	13.99	14.39	11.35	1.48		-389	2.28	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C041-PZM036	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: 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
Permanent Wells

ARM Group Inc.

Project Name:	COA GW	Project Number:	200210
Well Number:	CO42-PZM004	Date:	3/10/21
Well Diameter (in):	2	One Well Volume (gal):	
Depth to Product (ft):	NA	QED Controller Settings:	
Depth to Water (ft):	6.02	Flow Rate (mL/min)	379
Product Thickness (ft):	NA	Length of time Purged (min)	25
Depth to Bottom (ft):	16.77	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
858	0.0	6.02	16.30	7.41	0.674		113	9.24	
903	0.5	6.10	15.95	7.70	0.669		80	7.70	
908	1.0	6.21	15.59	7.72	0.670		74	6.33	
913	1.5	6.34	15.25	7.65	0.674		42	5.62	
918	2.0	6.47	14.94	7.68	0.677		48	5.16	
923	2.5	6.55	14.69	7.69	0.680		56	4.88	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO42-PZM004	930	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: 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.

Project Name:	COA GW	Project Number:	200102.10
Well Number:	C055-PZM000	Date:	3/11/24
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	14.46	Flow Rate (mL/min)	189
Product Thickness (ft):	NA	Length of time Purged (min)	5
Depth to Bottom (ft):	~~12.09~~ 17.09	Condition of Pad/Cover:	Non 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	0.0	16.07	17.16	11.71	1.35		-50	95.8	
1039	0.25	16.95	17.04	11.69	1.35		-94	48.6	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C055-PZM000	1045	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: LLP

Comments: *purged slow due to quick drawdown
Took sample after 10 min of pumping

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.

Project Name: COA GW	Project Number: 20010210
Well Number: C056-PZP001	Date: 3/10/20
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 15.29	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 15
Depth to Bottom (ft): 19.14	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
1454	0.0	15.29	19.21	11.30	2.56		-186	3.58	
1459	0.5	15.29	19.74	11.28	2.56		-187	3.15	
1504	1.0	15.29	20.11	11.22	2.53		-193	2.92	
1509	1.5	15.29	20.62	11.21	2.50		-200	2.78	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C056-PZP001	1510	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: 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.

Project Name:	COA GW	Project Number:	20012210
Well Number:	C058-PZM001	Date:	3/11/21
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	13.77	Flow Rate (mL/min)	341
Product Thickness (ft):	NA	Length of time Purged (min)	15
Depth to Bottom (ft):	19.30	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
953	0.0	13.77	18.95	11.06	1.59		-114	20.4	
958	0.45	13.95	18.77	9.23	1.59		-40	17.1	
1003	0.90	14.11	18.61	9.16	1.60		-31	16.4	
1008	1.35	14.24	18.35	9.06	1.62		-21	15.8	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C058-PZM001	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: UP

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.

Project Name:	COA GW	Project Number:	20210210
Well Number:	C06D-PZPOO1	Date:	3/16/21
Well Diameter (in):	2	One Well Volume (gal):	
Depth to Product (ft):	NA	QED Controller Settings:	
Depth to Water (ft):	15.21	Flow Rate (mL/min)	304
Product Thickness (ft):	NA	Length of time Purged (min)	30
Depth to Bottom (ft):	18.94	Condition of Pad/Cover:	unk. / 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
802	0.0	15.21	19.80	7.92	2.03		74	9.15	
807	0.4	15.25	19.05	10.40	2.10		-78	5.22	
812	0.8	15.30	18.08	10.82	2.22		-144	4.42	
817	1.2	15.36	17.52	10.88	2.28		-171	3.99	
822	1.6	15.43	16.71	10.97	2.36		-184	3.63	
827	2.0	15.49	16.42	10.99	2.38		-189	3.49	
832	2.4	15.52	15.99	11.07	2.40		-190	3.41	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C06D-PZPOO1	835	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 200102.10
Well Number: C093-PZM	Date: 3/4/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 9.98	Flow Rate (mL/min) 304
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 19.54	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
1348	0.0	9.98	21.12	8.25	0.406		-147	20.2	
1353	0.4	9.99	21.16	8.33	0.399		-201	18.5	
1358	0.8	10.01	21.20	8.17	0.415		-245	16.3	
1403	1.2	10.02	21.29	6.90	0.439		-205	14.8	
1408	1.6	10.02	21.39	6.81	0.457		-211	12.4	
1413	2.0	10.03	21.53	9.32	0.491		-352	11.9	
1418	2.4	10.04	21.69	9.64	0.527		-363	10.8	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C093-PZM	1425	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: 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.

Project Name: COA GW	Project Number: 2001020
Well Number: C0182-MWI	Date: 3/10/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 8.60	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 53.41	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
1218	0.0	8.60	22.22	7.95	0.631		-126	6.61	
1223	0.5	8.64	21.91	7.88	0.618		-255	5.47	
1228	1.0	8.69	21.90	7.42	0.612		-247	5.02	
1233	1.5	8.73	22.02	7.43	0.606		-256	4.63	
1238	2.0	8.79	22.12	7.39	0.604		-263	4.23	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0182-MWI	1245	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: 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
Permanent Wells

ARM Group Inc.

Project Name:	COA GW	Project Number:	20010210
Well Number:	CO190-MWS	Date:	3/11/21
Well Diameter (in):	2	One Well Volume (gal):	
Depth to Product (ft):	NA	QED Controller Settings:	
Depth to Water (ft):	13.83	Flow Rate (mL/min)	341
Product Thickness (ft):	NA	Length of time Purged (min)	15
Depth to Bottom (ft):	24.20	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
1321	0.0	13.83	20.77	7.01	1.35		-204	25.4	
1326	0.45	13.97	20.85	6.90	1.38		-198	19.0	
1331	0.90	14.11	20.94	6.91	1.41		-195	17.4	
1336	1.35	14.27	20.97	6.92	1.41		-190	16.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO190-MWS	1340	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: UP

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.

Project Name:	COA GW	Project Number:	20010210
Well Number:	CO195-MW5	Date:	3/4/21
Well Diameter (in):	2	One Well Volume (gal):	
Depth to Product (ft):	NA	QED Controller Settings:	
Depth to Water (ft):	13.97	Flow Rate (mL/min)	304
Product Thickness (ft):	NA	Length of time Purged (min)	25
Depth to Bottom (ft):	38.40	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
1223	0.0	13.97	20.29	11.54	0.504		-167	18.50	
1228	0.4	14.09	20.47	11.71	0.972		-185	15.64	
1233	0.8	14.16	20.64	12.00	1.76		-231	14.07	
1238	1.2	14.24	20.74	12.08	1.92		-259	12.72	
1243	1.6	14.30	20.78	12.12	1.92		-267	11.66	
1248	2.0	14.37	20.75	12.11	2.00		-275	10.73	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO195-MW5	1250	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: 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)

Quarter 2 2021

Low Flow Sampling
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 210210
Well Number: CO23-PZM008	Date: 5/25/21
Well Diameter (in):	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 15.30	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 22.11	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
1312	0.0	15.31	20.88	11.49	1.88		-275	11.9	
1317	0.4	15.31	21.13	11.66	1.85		-305	7.5	
1322	0.8	15.31	21.33	11.68	1.84		-304	6.3	
1327	1.2	15.31	21.60	11.62	1.85		-302	6.1	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO23-PZM008	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	
		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: CLP

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.

Project Name: COA GW	Project Number: 2101210
Well Number: CO24-P2M007	Date: 5/25/24
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 14.99	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 22.09	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
1224	0.0	15.12	21.19	9.60	0.798		-93	14.7	
1229	0.45	15.19	20.66	10.83	0.841		-165	10.6	
1234	0.90	15.24	20.34	10.96	0.982		-191	8.8	
1239	1.35	15.31	20.18	11.00	1.01		-200	6.7	
1244	1.80	15.36	20.12	10.98	1.11		-199	5.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO24-P2M007	1245	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 2101020
Well Number: C026-PZM007	Date: 5/25/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 12.17	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 19.25	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
1423	0.5	12.22	19.40	9.91	0.596		-40	47.9	
1428	0.5	12.24	19.42	9.49	0.594		-13	14.5	
1433	1.0	12.28	19.47	9.34	0.586		-3	9.6	
1438	1.5	12.34	21.38	9.24	0.587		8	9.2	
1443	2.0	12.46	22.66	9.19	0.588		13	8.6	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C026-PZM007	1450	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: [signature]

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.

Project Name: COA GW	Project Number: 21010210
Well Number: C027-PZM012	Date: 5/27/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 4.67	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 17.5	Condition of Pad/Cover: Unlocked tall grass

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
1107	0.0	4.68	30.50	9.56	1.02		-301	10.0	
1112	0.5	4.70	29.73	9.13	1.00		-340	8.3	
1117	1.0	4.71	29.19	9.03	1.02		-357	6.4	
1122	1.5	4.72	28.84	8.97	1.02		-357	5.8	
1127	2.0	4.72	28.45	8.91	1.03		-363	5.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C027-PZM012	1140	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: 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.

Project Name: COA GW	Project Number: 2101210
Well Number: CO27-PZM046	Date: 5/27/21
Well Diameter (in): 2"	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 7.55	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 57.15	Condition of Pad/Cover: Unk / Ok tall grass

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
1151	0.0	7.55	27.46	11.41	1.16		-403	12.4	
1156	0.5	7.55	27.08	11.45	1.16		-427	7.8	
1201	1.0	7.55	26.62	11.45	1.15		-434	6.4	
1206	1.5	7.55	26.40	11.44	1.14		-435	5.9	
1211	2.0	7.55	26.16	11.42	1.15		-437	5.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO27-PZM046	1220	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 2101210
Well Number: C028-PZM010	Date: 5/27/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 11.93	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 22.10	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
1417	0.0	11.93	30.70	9.47	4.11		-183	132.4	
1422	0.4	11.95	30.74	9.35	3.95		-150	77.6	
1427	0.8	11.96	30.76	9.25	3.30		-102	52.5	
1432	1.2	11.97	30.87	8.87	2.99		-74	30.9	
1437	1.6	11.98	31.00	8.81	2.91		-62	25.6	
1442	2.0	11.99	31.12	8.78	2.88		-55	24.8	
1447	2.4	12.00	31.26	8.77	2.85		-52	23.2	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C028-PZM010	1500	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: 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
Permanent Wells

ARM Group Inc.

Project Name: DOA GW	Project Number: 2010210
Well Number: C023-PZM04B	Date: 5/27/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 12.64	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 60.90	Condition of Pad/Cover: UNK / 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	0.0	12.64	30.66	10.06	0.517		-285	87.7	
1350	0.45	12.64	30.19	10.15	0.497		-310	56.3	
1355	0.90	12.64	30.03	10.16	0.498		-317	38.5	
1400	1.35	12.64	30.01	10.16	0.498		-323	35.4	
1405	1.80	12.64	30.11	10.17	0.498		-328	33.2	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C023-PZM04B	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: CP

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: COA GW	Project Number: 21010210
Well Number: C030-PZM015	Date: 5/24/21
Well Diameter (in): 2	One Well Volume (gal): ____
Depth to Product (ft): NA	QED Controller Settings: ____
Depth to Water (ft): 12.24	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 27.60	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
1010	0.0	12.24	21.43	8.50	0.001		-107	116.3	
1015	0.4	12.24	21.25	8.19	0.703		-114	74.4	
1020	0.8	12.24	21.03	9.20	0.676		-142	36.2	
1025	1.2	12.24	20.94	9.07	0.670		-141	29.6	
1030	1.6	12.24	20.82	8.87	0.655		-135	27.4	
1035	2.0	12.24	20.70	8.81	0.649		-129	22.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C030-PZM05	1040	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA-6W	Project Number: 2010210
Well Number: C030-PZM060	Date: 5/24/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 13.97	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 23.10	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
1116	0.10	13.97	20.49	8.36	6.67		-52	19.5	
1121	0.45	13.97	20.33	8.11	6.71		-21	10.1	
1126	0.90	13.97	20.26	7.88	6.75		-7	8.6	
1131	1.35	13.97	20.09	7.60	6.76		13	7.1	
1136	1.80	13.97	20.00	7.51	6.78		20	6.5	
1141	2.25	13.97	19.89	7.43	6.79		28	5.9	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C030-PZM060	1150	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA SW	Project Number: 2101021O
Well Number: C036-PZM008	Date: 5/26/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 6.18	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 14.13	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
833	0.0	6.21	24.22	11.56	1.49		-245	24.3	
838	0.4	6.23	23.68	11.77	1.46		-283	20.4	
843	0.8	6.24	23.40	11.84	1.42		-294	14.9	
848	1.2	6.26	23.17	11.86	1.40		-297	13.7	
853	1.6	6.27	22.98	11.86	1.39		-300	12.8	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C036-PZM008	900	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: 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
Permanent Wells

ARM Group Inc.

Project Name:	COA GW	Project Number:	20102.10
Well Number:	C036-PZM043	Date:	5/26/21
Well Diameter (in):	2	One Well Volume (gal):	
Depth to Product (ft):	NA	QED Controller Settings:	
Depth to Water (ft):	6.66	Flow Rate (mL/min)	341
Product Thickness (ft):	NA	Length of time Purged (min)	20
Depth to Bottom (ft):	52.08	Condition of Pad/Cover:	OL / 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
936	0.0	6.67	22.80	11.50	1.69		-230	33.5	
941	0.45	6.67	22.75	11.43	1.67		-269	18.4	
946	0.90	6.67	22.72	11.41	1.67		-276	12.6	
951	1.35	6.67	22.75	11.39	1.66		-277	11.8	
956	1.80	6.67	22.78	11.39	1.65		-277	10.5	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C036-PZM043	1005	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: CLP

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.

Project Name: COA GW	Project Number: 210210
Well Number: C037-PZM003	Date: 6/7/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): 11.00 thick silt? or product	QED Controller Settings:
Depth to Water (ft): 10.55	Flow Rate (mL/min) 303
Product Thickness (ft): see above 0.30	Length of time Purged (min) 30
Depth to Bottom (ft): 11.30	Condition of Pad/Cover: Unk 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
1047	0.0	10.60	27.48	99.19	2.75		-226	27.7	
1052	0.4	10.65	27.57	7.99	2.81		-203	24.2	
1057	0.8	10.69	27.50	7.87	2.83		-182	21.8	
1102	1.2	10.71	27.13	12.01	2.97		-177	18.8	
1107	1.6	10.77	27.14	11.83	0.588		-153	16.4	
1112	2.0	10.86	27.14	11.75	0.590		-147	15.6	
1117	2.4	10.89	27.15	11.69	0.600		-139	15.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C037-PZM003	1120	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 2101210
Well Number: C037-PZM038	Date: 6/7/24
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 12.30	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 35
Depth to Bottom (ft): 49.78	Condition of Pad/Cover: Unk / 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
935	0.0	12.30	25.04	7.32	0.002		-256	94.0	
940	0.45	12.30	25.26	7.31	0.002		-237	80.8	
945	0.90	12.30	25.49	7.36	0.002		-206	67.4	
950	1.35	12.30	25.72	7.41	0.002		-174	49.5	
955	1.80	12.30	25.96	9.04	0.845		-148	38.3	
1000	2.25	12.30	26.03	8.90	0.827		-134	35.4	
1005	2.70	12.30	26.13	8.80	0.827		-130	34.3	
1010	3.15	12.30	26.28	8.73	0.819		-123	32.8	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C037-PZM038	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: CLP

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.

Project Name: COA GW	Project Number: 210210
Well Number: C038-PZM006	Date: 5/26/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 4.84	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 15.67	Condition of Pad/Cover: Y, Y / 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
1017	0.0	4.84	23.36	10.02	2.14		-179	82.3	
1022	0.5	4.84	23.52	9.90	2.08		-221	49.7	
1027	1.0	4.85	23.75	9.77	2.06		-204	40.3	
1032	1.5	4.85	24.04	9.67	2.02		-191	35.6	
1037	2.0	4.85	24.35	9.56	1.99		-182	33.8	
1042	2.5	4.85	24.65	9.44	1.98		-176	31.5	
1047	3.0	4.85	24.80	9.59	1.98		-184	29.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C038-PZM006	1050	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: UP

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.

Project Name: COA GW	Project Number: 210210
Well Number: C038-PZM043	Date: 5/26/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 6.67	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 49.58	Condition of Pad/Cover: unk / 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
1208	0.9	6.67	24.93	9.50	1.40		-203	236.3	
1213	0.45	6.67	25.01	9.27	1.36		-160	117.5	
1218	0.90	6.67	25.18	9.12	1.36		-117	93.2	
1223	1.35	6.67	25.48	9.01	1.36		-84	58.5	
1228	1.80	6.67	25.90	8.89	1.34		-61	41.0	
1233	2.25	6.67	26.56	8.78	1.33		-48	38.9	
1238	2.70	6.67	27.55	8.69	1.31		-40	36.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C038-PZM043	1245	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 210210
Well Number: C039-PZM007	Date: 5/27/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 7.32	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 15
Depth to Bottom (ft): 17.90	Condition of Pad/Cover: Unk / OK Heavy Brush

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
938	0.0	7.33	23.11	7.67	2.22		-298	14.9	
943	0.45	7.33	24.29	8.85	2.07		-327	7.1	
948	0.90	7.34	25.02	8.97	1.99		-318	6.7	
953	1.35	7.34	25.77	8.98	1.94		-316	6.2	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C039-PZM007	955	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: 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.

Project Name: COA GW	Project Number: 210210
Well Number: C039-PZM042	Date: 5/27/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 8.21	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 45.95	Condition of Pad/Cover: UNL / OK

PURGING RECORD — Heavy brush

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
1004	0.0	8.23	27.39	11.99	2.32		-381	22.5	
1009	0.45	8.25	27.74	12.09	2.25		-457	20.6	
1014	0.90	8.28	28.15	12.11	2.22		-471	18.4	
1019	1.35	8.30	28.43	12.12	2.20		-476	17.6	
1024	1.80	8.32	28.75	12.10	2.20		-480	16.8	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C039-PZM042	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: 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.

Project Name:	COR GW	Project Number:	2101210
Well Number:	C040-PZM008	Date:	6/8/21
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	6.90	Flow Rate (mL/min)	303
Product Thickness (ft):	NA	Length of time Purged (min)	35
Depth to Bottom (ft):	17.73	Condition of Pad/Cover:	Unk. / Heavy veg.

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
1323	0.0	6.90	26.47	8.41	1.14		-163	42.7	
1328	0.4	6.90	26.90	8.36	1.11		-167	37.8	
1333	0.8	6.90	27.35	8.31	1.08		-172	35.2	
1338	1.2	6.90	27.97	8.25	1.10		-176	26.4	
1343	1.6	6.90	28.55	8.19	1.09		-178	14.3	
1348	2.0	6.90	29.09	8.14	1.07		-179	12.2	
1353	2.4	6.90	29.42	8.10	1.06		-179	3.7	
1358	2.8	6.90	29.75	8.07	1.08		-180	2.9	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C040-PZM008	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: UP

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.

Project Name: COA GW	Project Number: 2010210
Well Number: C041-PZM001	Date: 5/26/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 12.85	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 15.97	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
1253	0.0	12.87	28.67	8.03	0.848		-214	17.2	
1258	0.4	12.87	28.53	7.88	0.803		-24	12.9	
1303	0.8	12.88	28.55	7.87	0.789		-246	8.5	
1308	1.2	12.89	28.63	7.87	0.781		-253	8.2	
1313	1.6	12.89	28.83	7.86	0.774		-265	7.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C041-PZM001	1320	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: LCH

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.

Project Name: COA GW	Project Number: 2010210
Well Number: C041-PZM036	Date: 5/26/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 13.48	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 50.11	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
1355	0.0	13.49	29.49	9.70	1.38		-196	115.4	
1400	0.45	13.51	29.74	10.06	1.28		-145	83.2	
1405	0.90	13.51	29.78	10.06	1.27		-142	59.4	
1410	1.35	13.53	30.26	10.05	1.25		-403	46.1	
1415	1.80	13.54	30.16	10.00	1.23		-412	37.5	
1420	2.25	13.54	30.26	10.03	1.22		-423	34.3	
1425	2.70	13.55	30.34	10.04	1.22		-425	30.9	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C041-PZM036	1430	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: [signature]

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.

Project Name: COA GW	Project Number: 210210
Well Number: C042-PZM004	Date: 5/27/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 8.33	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 16.32	Condition of Pad/Cover: UNK. / 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
830	0.0	8.33	22.59	4.85	0.326		226	33.5	
835	0.4	8.33	22.40	5.24	0.297		214	18.9	
840	0.8	8.33	22.21	5.38	0.283		207	11.4	
845	1.2	8.33	22.04	5.48	0.273		203	10.7	
850	1.6	8.33	21.98	5.53	0.268		200	10.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C042-PZM004	855	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: CCP

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.

Project Name: COA GW	Project Number: 210210
Well Number: COSS-PZM000	Date: 6/2/21
Well Diameter (in): 2	One Well Volume (gal): ____
Depth to Product (ft): NA	QED Controller Settings: ____
Depth to Water (ft): 14.72	Flow Rate (mL/min) 189
Product Thickness (ft): NA	Length of time Purged (min) 10
Depth to Bottom (ft): 17.07	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
1401	0.0		24.09	8.90	0.821		35	202.1	
1406	0.25		24.23	10.95	1.53		-115	182.4	
1411	0.50		24.37	11.66	1.50		-116	111.9	
	Purged dry - waited for recharge to collect sample								

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
COSS-PZM000	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: 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.

Project Name: COA 6W	Project Number: 210210
Well Number: C056-PZP001	Date: 6/2/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 15.41	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 19.09	Condition of Pad/Cover: unk / 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
1030	0.0	15.41	21.89	11.46	2.09		-225	63.4	
1035	0.4	15.41	21.70	11.56	2.09		-232	22.5	
1040	0.8	15.41	21.55	11.62	2.06		-240	18.0	
1045	1.2	15.41	21.46	11.65	2.08		-239	17.5	
1050	1.6	15.41	21.42	11.68	2.09		-238	16.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C056-PZP001	1100	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: CLP

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.

Project Name: COA GW	Project Number: 21010210
Well Number: COSB-PZMOD1	Date: 6/3/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 13.21	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 35
Depth to Bottom (ft): 19.22	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
1342	0.0	13.72	26.71	10.65	0.973		-96	147.3	
1347	0.45	13.72	26.61	10.00	0.830		-55	95.6	
1352	0.90	13.72	Tubing pulled			Off		—	
1357	0.90	13.74	26.40	10.66	0.991		-64	94.8	
1402	1.35	13.74	26.38	10.19	0.990		-48	35.7	
1407	1.80	13.74	26.48	9.83	0.968		-26	26.4	
1412	2.25	13.74	26.63	9.73	0.974		-20	25.1	
1417	2.70	13.74	26.81	9.65	0.981		-15	24.0	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
COSB-PZMOD1	1420	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: CLP

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.

Project Name: COA GW	Project Number: 2101210
Well Number: C060-PZP001	Date: 5/25/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 15.34	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 19.80	Condition of Pad/Cover: Unk / 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
1333	0.0	15.49	22.51	11.00	2.13		-114	38.6	
1338	0.5	15.69	22.49	11.20	2.13		-137	22.5	
1343	1.0	15.85	22.41	11.50	2.14		-169	14.7	
1348	1.5	16.05	22.39	11.63	2.16		-186	10.1	
1353	2.0	16.18	22.48	11.70	2.16		-195	9.3	
1358	2.5	16.30	22.62	11.74	2.15		-205	8.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C060-PZP001	1405	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: UP

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.

Project Name: COA GW	Project Number: 210120
Well Number: C093-PZM	Date: 5/25/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 11.86	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 19.42	Condition of Pad/Cover: Unk. / 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
1107	0.0	11.86	20.68	8.72	0.514		-197	187.4	
1112	0.4	11.86	20.26	9.11	0.526		-263	93.1	
1117	0.8	11.86	20.19	9.03	0.516		-264	42.7	
1122	1.2	11.87	20.20	8.90	0.494		-233	18.5	
1127	1.6	11.87	20.29	8.84	0.460		-194	17.7	
1132	2.0	11.87	20.45	8.78	0.422		-170	17.1	
1137	2.4	11.87	20.57	8.76	0.366		-163	16.8	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C093-PZM	1140	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: LLP

Comments: ORP Not Stable

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.

Project Name: COA GW	Project Number: 21010210
Well Number: CO179-MW5	Date: 6/28/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): 7.45	QED Controller Settings: —
Depth to Water (ft): 7.80	Flow Rate (mL/min) NA
Product Thickness (ft): 0.35	Length of time Purged (min) NA
Depth to Bottom (ft): 17.69	Condition of Pad/Cover: OK / Heavy Veg

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

LNAPL Sample only

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO179-MW5 LNAPL	945	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: CLP

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.

Project Name: COA GW	Project Number: 210210
Well Number: COI80-MW5	Date: 6/3/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 11.37	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 35
Depth to Bottom (ft): 17.70	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
1232	0.0	11.39	23.62	11.79	2.87		-290	303.1	
1237	0.4	11.39	23.90	11.74	2.82		-309	211.6	
1242	0.8	11.39	24.07	11.71	2.81		-315	85.4	
1247	1.2	11.39	24.40	11.68	2.79		-318	77.8	
1252	1.6	11.39	24.53	11.90	2.79		-326	53.2	
1257	2.0	11.39	24.73	11.67	2.78		-319	44.1	
1302	2.4	11.39	25.01	11.64	2.75		-319	40.8	
1307	2.8	11.39	25.23	11.62	2.74		-321	37.5	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
COI80-MW5	1315	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: 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.

Project Name: COA 610	Project Number: 2101210
Well Number: C0180-MW1	Date: 6/3/24
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 11.34	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 52.21	Condition of Pad/Cover: Good Poison ivy

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
1131	0.0	11.34	23.19	11.38	1.23		-196	19.1	
1136	0.4	11.34	23.14	11.65	1.24		-284	15.2	
1141	0.8	11.34	23.08	11.83	1.23		-305	10.6	
1146	1.2	11.34	23.07	11.86	1.22		-310	9.9	
1151	1.6	11.34	23.11	11.88	1.21		-313	9.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0180-MW1	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: 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.

Project Name:	COA GW	Project Number:	21010210
Well Number:	C0181-MWS	Date:	6/7/21
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	12.26	Flow Rate (mL/min)	303
Product Thickness (ft):	NA	Length of time Purged (min)	25
Depth to Bottom (ft):	17.67	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
1321	0.0	12.27	29.11	11.30	1.79		-272	105.1	
1326	0.4	12.27	29.41	11.36	1.62		-324	62.5	
1331	0.8	12.28	29.47	11.30	1.48		-317	41.9	
1336	1.2	12.28	29.50	11.24	1.43		-306	29.4	
1341	1.6	12.29	29.56	11.23	1.41		-310	26.9	
1346	2.0	12.29	29.69	11.22	1.39		-319	25.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0181-MWS	1350	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: CLP

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.

Project Name:	COA GW	Project Number:	2010210
Well Number:	CO181-MWI	Date:	6/7/21
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	12.54	Flow Rate (mL/min)	379
Product Thickness (ft):	NA	Length of time Purged (min)	25
Depth to Bottom (ft):	53.60	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
1225	0.2	12.34	26.77	9.27	0.812		-71	71.4	
1230	0.5	12.35	26.92	9.27	0.747		-59	63.0	
1235	1.0	12.36	27.27	9.21	0.749		-72	46.1	
1240	1.5	12.36	27.52	9.19	0.749		-91	33.5	
1245	2.0	12.37	27.99	9.15	0.745		-100	31.6	
1250	2.5	12.38	28.29	9.25	0.743		-108	28.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO181-MWI	1300	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: 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.

Project Name: CDA GW	Project Number: 2101210
Well Number: C0182-MW1	Date: 5/27/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 8.32	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 53.52	Condition of Pad/Cover: good / OK Overgrown

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	0.0	8.32	26.79	8.42	0.845		-256	19.7	
1249	0.4	8.32	27.01	8.19	0.840		-255	12.5	
1254	0.8	8.32	27.27	8.11	0.837		-254	9.3	
1259	1.2	8.32	27.60	8.05	0.836		-254	8.8	
1304	1.6	8.32	27.74	8.02	0.835		-254	7.6	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0182-MW1	1315	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: 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
Permanent Wells

ARM Group Inc.

Project Name:	CoA GW	Project Number:	2101020
Well Number:	CO186-MW25	Date:	6/7/24
Well Diameter (in):	2	One Well Volume (gal):	
Depth to Product (ft):	NA	QED Controller Settings:	
Depth to Water (ft):	11.00	Flow Rate (mL/min)	341
Product Thickness (ft):	NA	Length of time Purged (min)	20
Depth to Bottom (ft):	23.30	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
1432	0.0	11.01	29.34	8.95	0.539		-227	24.3	
1437	0.45	11.01	29.06	9.05	0.545		-242	18.6	
1442	0.90	11.01	29.81	9.03	0.540		-249	15.2	
1447	1.35	11.01	30.34	8.96	0.556		-250	14.7	
1452	1.80	11.01	30.73	8.91	0.524		-249	14.1	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO186-MW25	1500	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: CLP

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.

Project Name: 40A GW	Project Number: 210210
Well Number: CO190-MW5	Date: 5/25/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 12.52	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 24.23	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
1029	0.0	12.85	19.18	9.10	2.96		-200	20.8	
1034	0.45	13.10	19.53	7.33	2.79		-190	11.0	
1039	0.90	13.61	19.80	7.12	2.64		-179	7.5	
1044	1.35	14.08	20.01	7.10	2.51		-178	5.9	
1049	1.80	14.22	20.23	7.14	2.31		-184	5.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO190-MW5	1100	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 21010210
Well Number: CO191-MW5	Date: 5/25/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 12.88	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 15
Depth to Bottom (ft): 22.54	Condition of Pad/Cover: Good / Unknown

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
919	0.0	12.88	19.11	12.13	0.966		-340	28.8	
924	0.5	12.89	19.08	12.02	0.966		-345	14.3	
929	1.0	12.90	19.06	11.98	0.963		-349	11.7	
934	1.5	12.90	19.02	11.96	0.961		-352	10.9	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO191-MW5	950	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: CLP

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.

Project Name: COA GW	Project Number: 2010210
Well Number: C0194 MW5	Date: 5/24/24
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 14.28	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 24.73	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
1255	0.0	14.28	19.82	12.81	7.19		-207	34.4	
1300	0.45	14.29	19.67	12.94	7.14		-241	23.8	
1305	0.90	14.29	19.60	12.97	7.13		-248	15.7	
1310	1.35	14.29	19.49	13.00	7.14		-260	12.2	
1315	1.80	14.29	19.46	13.01	7.12		-262	10.6	
1320	2.25	14.29	19.43	13.02	7.12		-264	8.5	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0194-MW5	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	
		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: 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.

Project Name: EOA GW	Project Number: 2101210
Well Number: C0195-MW5	Date: 5/24/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 14.38	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 38.32	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
1338	2.0	14.38	19.48	12.75	0.419		-136	221.1	
1343	0.4	14.38	19.53	12.23	0.334		-133	85.5	
1348	0.8	14.38	19.52	11.63	0.268		-111	36.2	
1353	1.2	14.38	19.52	11.46	0.261		-104	30.5	
1358	1.6	14.38	19.49	11.33	0.246		-98	26.3	
1403	2.0	14.38	19.47	11.23	0.245		-88	25.1	
1408	2.4	14.38	19.43	11.15	0.249		-86	23.6	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0195-MW5	1415	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 2001020
Well Number: CO196-MW5	Date: 5/24/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 13.72	Flow Rate (mL/min) 341
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 30.80	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
1426	0.0	13.72	19.36	11.76	2.15		-172	17.5	
1431	0.45	13.72	19.39	11.79	2.13		-179	13.6	
1436	0.90	13.72	19.40	11.80	2.11		-248	12.4	
1441	1.35	13.72	19.38	11.84	2.10		-266	10.6	
1446	1.80	13.72	19.29	11.83	2.08		-269	9.3	
1451	2.25	13.72	19.07	11.82	2.04		-274	8.5	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO196-MW5	1500	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: 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
Permanent Wells

ARM Group Inc.

Project Name: COA GW	Project Number: 2101240
Well Number: C0198-MW5	Date: 5/25/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 14.02	Flow Rate (mL/min) 303
Product Thickness (ft): NA	Length of time Purged (min) 25
Depth to Bottom (ft): 38.01	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
840	0.0	14.03	21.43	12.70	7.55		-234	41.8	
845	0.4	14.03	20.84	12.93	7.74		-253	32.4	
850	0.8	14.04	20.26	13.03	7.99		-268	19.5	
855	1.2	14.04	19.86	13.07	8.14		-278	17.3	
900	1.6	14.04	19.44	13.10	8.20		-288	15.8	
905	2.0	14.04	19.30	13.11	8.29		-290	14.7	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0198MW5	910	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: UP

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.

Project Name: COA GW	Project Number: 2010210
Well Number: CO201-MW5	Date: 5/24/24
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 13.28	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 35.55	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
1217	0.0	13.30	19.71	11.35	1.72		-58	86.2	
1222	0.5	13.30	19.63	11.88	1.67		-148	41.1	
1227	1.0	13.31	19.57	11.94	1.64		-128	27.4	
1232	1.5	13.31	19.54	11.97	1.63		-184	24.6	
1237	2.0	13.31	19.57	11.99	1.61		-194	21.0	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
CO201-MW5	1245	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: 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.

Project Name: COA GW	Project Number: 2010210
Well Number: C0209-MW5	Date: 6/3/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 10.05	Flow Rate (mL/min) 379
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 28.35	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
800	0.2	10.05	22.89	11.03	1.75		-256	12.6	
805	0.5	10.04	22.58	11.10	1.71		-260	9.4	
810	1.0	10.04	22.31	11.20	1.67		-267	6.1	
815	1.5	10.04	22.08	11.23	1.66		-270	5.8	
820	2.0	10.04	21.90	11.25	1.68		-269	5.4	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0209-MW5	825	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: 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.

Project Name:	COA GW	Project Number:	2401020
Well Number:	C0209-MWF	Date:	6/3/21
Well Diameter (in):	2	One Well Volume (gal):	—
Depth to Product (ft):	NA	QED Controller Settings:	—
Depth to Water (ft):	10.02	Flow Rate (mL/min)	341
Product Thickness (ft):	NA	Length of time Purged (min)	25
Depth to Bottom (ft):	52.74	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
958	0.0	10.02	21.63	10.61	1.08		-82	22.7	
1003	0.45	10.02	21.54	10.38	1.09		-81	18.5	
1008	0.90	10.02	21.44	10.24	1.09		-79	15.3	
1013	1.35	10.02	21.34	10.11	1.09		-78	12.7	
1018	1.82	10.02	21.30	10.04	1.08		-77	11.8	
1023	2.25	10.02	21.27	9.97	1.08		-77	10.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
C0209-MWF	1030	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: CLP

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.

Project Name: COA GW	Project Number: 210210
Well Number: GDO1-MWI	Date: 6/8/21
Well Diameter (in): 2	One Well Volume (gal):
Depth to Product (ft): NA	QED Controller Settings:
Depth to Water (ft): 35.75	Flow Rate (mL/min) 757
Product Thickness (ft): NA	Length of time Purged (min) 20
Depth to Bottom (ft): 49.43	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
1026	0.0	35.76	17.50	6.52	10.2		-59	86.5	
1031	1.0	35.77	17.36	7.82	13.3		-182	4.0	
1036	2.0	35.78	17.11	8.21	13.4		-219	3.2	
1041	3.0	35.79	17.12	8.26	13.4		-227	2.8	
1046	4.0	35.79	17.13	8.31	13.5		-235	1.9	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
GDO1-MWI	1100	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	
Sub-pump used		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.

Project Name: COA GW	Project Number: 2101210
Well Number: GD02-MWI	Date: 6/8/21
Well Diameter (in): 2	One Well Volume (gal): —
Depth to Product (ft): NA	QED Controller Settings: —
Depth to Water (ft): 20.12	Flow Rate (mL/min) 606
Product Thickness (ft): NA	Length of time Purged (min) 30
Depth to Bottom (ft): 49.63	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
1207	0.8	20.18	20.22	8.53	0.937		-234	12.9	
1212	0.8	20.23	20.36	8.53	0.948		-329	9.7	
1217	1.6	20.25	20.40	8.35	0.965		-364	9.8	
1222	2.4	20.26	20.24	8.29	3.25		-373	5.6	
1227	3.2	20.27	20.53	8.31	3.11		-376	6.6	
1232	4.1	20.29	20.78	8.30	3.13		-380	6.0	
1237	4.9	20.31	21.10	8.29	3.15		-382	7.3	

MONITORING SAMPLE RECORD

Sample ID	Time Collected	Parameter/Order	Container	Perservative	Collected?
GD02-MWI	1245	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	
Used sub-pump		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)

Quarter 3 2021

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO23-PZMOOB	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2101020
Depth to Product (ft):	NA	Date:	9/7/21
Depth to Water (ft):	14.06	One Well Volume (gal):	1.3
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	22.13	Length of time Purged (min)	20

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	14.06	28.09	12.17	2.03		-299	7.40		
1349	0.5	14.06	27.55	12.23	1.81		-318	5.21		
1354	1.0	14.06	27.06	12.21	1.77		-327	4.54		
1359	1.5	14.06	26.91	12.20	1.77		-336	3.83		
1404	2.0	14.06	26.79	12.19	1.76		-343	3.55		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO23-PZMOOB	1410

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing Slu bo HS	✓
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: LM

Comments: No well permit attached

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO24-PZM007	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	21010240
Depth to Product (ft):	NA	Date:	9/7/24
Depth to Water (ft):	13.67	One Well Volume (gal):	1.37
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	22.09	Length of time Purged (min)	20

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	
1138	0.0	13.70	27.81	9.77	1.46		-203	8.11		
1143	0.4	13.70	27.87	9.90	1.50		-198	6.84		
1148	0.8	13.70	27.89	9.83	1.56		-196	6.03		
1153	1.2	13.70	28.03	9.76	1.61		-199	5.57		
1158	1.6	13.70	28.17	9.75	1.63		-203	5.28		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO24-PZM007	1205

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing — 5/8 bolts	✓
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	Y
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: CVP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO26-PZM007	Project Name:	CDA GW
Well Diameter (in):	2	Project Number:	21010210
Depth to Product (ft):	NA	Date:	9/8/21
Depth to Water (ft):	10.91	One Well Volume (gal):	1.35
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	19.22	Length of time Purged (min)	15

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	
1042	0.0	10.91	23.25	9.92	0.695		-244	7.11		
1047	0.45	10.91	23.51	9.86	0.678		-260	5.93		
1052	0.90	10.91	23.86	9.80	0.666		-270	6.49		
1057	1.35	10.91	24.11	9.72	0.663		-273	5.81		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO26-PZM007	1100

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	N

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing FM	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: LAP

Comments: Well is below ground elevation and soil accumulates in casing (FM)

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO27-PZM012	Project Name:	COA-GW
Well Diameter (in):	2	Project Number:	2101210
Depth to Product (ft):	NA	Date:	9/14/21
Depth to Water (ft):	4.67	One Well Volume (gal):	2.08
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	17.41	Length of time Purged (min)	30

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	
1008	0.0	4.67	26.23	6.85	1.29		-153	5.12		
1013	0.45	4.67	25.79	8.35	1.21		-246	3.79		
1018	0.90	4.68	25.68	8.17	1.14		-239	3.43		
1023	1.35	4.68	25.63	7.95	1.12		-232	3.20		
1028	1.80	4.68	25.63	7.62	1.10		-224	2.56		
1033	2.25	4.69	25.68	7.66	1.10		-223	2.22		
1038	2.70	4.69	25.86	7.58	1.10		-222	1.82		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO27-PZM012	1045

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing S/U Bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: LMP

Comments: Lid locked on and cracked but accessible missing cap but installed

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C027-PZM046	Project Name:	CoA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/14/21
Depth to Water (ft):	7.21	One Well Volume (gal):	7.15
Product Thickness (ft):	NA	Flow Rate (mL/min)	329
Depth to Bottom (ft):	51.10	Length of time Purged (min)	45

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	
1106	0.0	7.21	26.77	8.00	0.867		-302	6.20		
1111	0.5	7.21	27.04	7.26	0.863		-308	4.96		
1116	1.0	7.21	27.29	6.74	0.856		-299	4.35		
1121	1.5	7.21	27.42	6.46	0.853		-292	4.02		
1126	2.0	7.21	27.47	6.20	0.852		-284	3.61		
1131	2.5	7.21	27.53	5.88	0.850		-272	3.26		
1136	3.0	7.21	27.71	5.51	0.847		-259	3.14		
1141	3.5	7.21	27.87	6.36	1.00		-297	2.80		
1146	4.0	7.21	28.04	6.28	0.996		-287	2.73		
1151	4.5	7.21	28.17	6.21	0.994		-281	2.61		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C027-PZM046	1205

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing — 5/16 bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: CLP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C030-PZM015	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210102D
Depth to Product (ft):	NA	Date:	9/16/21
Depth to Water (ft):	11.41	One Well Volume (gal):	2.64
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	27.60	Length of time Purged (min)	30

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	
809	0.0	11.42	22.83	12.18	2.19		-221	4.90		
814	0.45	11.42	22.62	12.55	2.20		-299	4.44		
819	0.90	11.43	22.42	12.69	2.26		-307	4.18		
824	1.35	11.43	22.33	12.75	2.29		-312	3.86		
829	1.80	11.43	22.26	12.82	2.30		-315	3.53		
834	2.25	11.44	22.23	12.85	2.31		-320	3.20		
839	2.70	11.44	22.23	12.77	2.31		-320	3.07		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C030-PZM015	845

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section. Mod Heavy Brush	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing Silv Bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C036-PZM008	Project Name:	COA 610
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/9/21
Depth to Water (ft):	5.93	One Well Volume (gal):	1.34
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	14.15	Length of time Purged (min)	40

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	
1324	0.0	5.93	25.20	10.51	2.07		-275	9.01		
1329	0.45	5.93	24.67	9.98	1.51		-221	8.39		
1334	0.90	5.93	24.59	10.04	1.46		-221	6.15		
1339	1.35	5.93	24.71	10.07	1.28		-222	4.37		
1344	1.80	5.93	24.90	9.94	1.01		-198	3.12		
1349	2.25	5.93	25.20	9.82	0.900		-186	2.63		
1354	2.70	5.93	25.50	9.73	0.736		-183	2.04		
1359	3.15	5.93	26.38	9.79	0.722		-191	1.82		
1404	3.60	5.93	26.59	9.84	0.726		-194	1.60		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C036-PZM008	1410

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing — slu bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: CLP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C036-PZM043	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	21010210
Depth to Product (ft):	NA	Date:	9/9/21
Depth to Water (ft):	6.71	One Well Volume (gal):	6.39
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	45.94	Length of time Purged (min)	25

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	
1510	0.0	6.72	28.27	9.79	1.43		-6	9.28		
1515	0.4	6.75	27.86	9.36	1.43		17	7.40		
1520	0.8	6.77	27.60	9.32	1.44		29	5.02		
1525	1.2	6.78	27.29	9.28	1.44		63	3.74		
1530	1.6	6.79	27.05	9.26	1.45		60	2.37		
1535	2.0	6.80	26.73	9.22	1.47		55	1.83		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C036-PZM043	1540

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing S/M Bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: LP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C037-PZM038	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	21010210
Depth to Product (ft):	NA	Date:	9/13/21
Depth to Water (ft):	11.43	One Well Volume (gal):	10.25
Product Thickness (ft):	NA	Flow Rate (mL/min)	3,41
Depth to Bottom (ft):	49.80	Length of time Purged (min)	25

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	11.43	26.29	12.12	1.76		-381	10.01		
1429	0.45	11.43	26.34	12.20	1.77		-388	7.17		
1434	0.90	11.43	26.41	12.14	1.79		-386	5.27		
1439	1.35	11.43	26.52	12.09	1.80		-387	3.83		
1444	1.80	11.43	26.66	12.02	1.80		-385	2.12		
1459	2.25	11.43	26.81	11.95	1.80		-379	1.89		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C037-PZM038	1505

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO		BTEX and naphthalene	Y
TPH-DRO		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
O&G			
Total Cyanide			
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	X

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	Slu bolts

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C038-PZM006	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	21010210
Depth to Product (ft):	NA	Date:	9/14/21
Depth to Water (ft):	6.20	One Well Volume (gal):	1.54
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	15.64	Length of time Purged (min)	25

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	
822	0.0	6.21	22.94	7.72	2.28		-57	7.12		
827	0.4	6.21	22.95	8.32	2.22		-324	5.08		
832	0.8	6.21	22.98	8.63	2.17		-315	4.52		
837	1.2	6.21	23.17	8.23	2.16		-310	3.21		
842	1.6	6.21	23.50	8.14	2.14		-314	2.63		
847	2.0	6.21	23.80	8.10	2.13		-317	2.20		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM006	850

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing 5/8 bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: CLP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C038-PZM043	Project Name:	CDA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/14/21
Depth to Water (ft):	6.85	One Well Volume (gal):	6.96
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	49.55	Length of time Purged (min)	20

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	
927	0.0	7.03	24.61	11.97	1.36		-460	6.29		
932	0.5	7.25	24.85	11.85	1.32		-463	4.86		
937	1.0	7.53	24.98	11.89	1.32		-465	3.41		
942	1.5	7.71	25.11	11.89	1.31		-466	2.60		
947	2.0	7.94	25.24	11.97	1.30		-470	1.90		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM043	1000

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing — S/U Bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: LW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C039-PZM007	Project Name:	COA 610
Well Diameter (in):	2	Project Number:	210102.10
Depth to Product (ft):	NA	Date:	9/9/21
Depth to Water (ft):	5.93	One Well Volume (gal):	1.95
Product Thickness (ft):	NA	Flow Rate (mL/min)	3.41
Depth to Bottom (ft):	19.88	Length of time Purged (min)	30

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	
823	0.0	6.06	23.70	4.78	2.29		-20	8.11		
829	0.4	6.11	23.45	2.05	2.23		70	6.25		
833	0.8	6.23	22.61	4.29	2.21		45	4.49		
838	1.2	6.29	22.44	6.32	2.22		-125	3.58		
843	1.6	6.36	22.33	6.92	2.24		-154	3.15		
848	2.0	6.44	22.26	6.95	2.23		-154	2.94		
853	2.4	6.50	22.22	6.96	2.22		-157	2.68		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM007	900

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (**total**)			
TAL Metals and Mercury (**dissolved**)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing — Six bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: CLP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C039-PZM042	Project Name:	COA-GW
Well Diameter (in):	2	Project Number:	2101210
Depth to Product (ft):	N/A	Date:	9/9/21
Depth to Water (ft):	7.42	One Well Volume (gal):	6.87
Product Thickness (ft):	N/A	Flow Rate (mL/min)	3.79
Depth to Bottom (ft):	49.55	Length of time Purged (min)	35

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	
1200	0.0	7.45	23.18	9.16	2.27		-213	7.41		
1205	0.5	7.47	22.69	8.79	2.29		-231	5.95		
1210	1.0	7.47	22.50	8.62	2.30		-233	4.08		
1215	1.5	7.47	22.33	8.27	2.31		-220	2.94		
1220	2.0	7.47	22.37	5.01	2.30		-104	2.61		
1225	2.5	7.47	22.69	6.38	2.28		-148	2.30		
1230	3.0	7.47	22.91	6.33	2.24		-145	2.22		
1235	3.5	7.47	23.01	6.33	2.24		-149	2.05		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM042	1240

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing — Shoebolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: CLR

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C040-PZM008	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/8/21
Depth to Water (ft):	5.83	One Well Volume (gal):	1.94
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	17.76	Length of time Purged (min)	35

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	0.0	15.85	29.37	7.14	1.94		8	11.6		
1450	0.45	15.85	28.55	5.53	1.37		-1	9.90		
1455	0.90	15.85	28.13	5.53	1.39		-55	9.22		
1500	1.35	15.85	28.08	5.52	1.40		-68	8.41		
1505	1.80	15.85	28.01	5.52	1.42		-86	7.55		
1510	2.25	15.85	28.05	5.51	1.47		-102	6.97		
1515	2.70	15.85	28.08	5.51	1.57		-109	6.49		
1520	3.15	15.85	28.09	5.56	1.62		-116	6.12		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C040-PZM008	1530

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO	N	BTEX and naphthalene	Y
TPH-DRO			
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing — Sub bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: LMP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C041-PZM001	Project Name:	CDA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/14/21
Depth to Water (ft):	12.15	One Well Volume (gal):	0.62
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	16.00	Length of time Purged (min)	15

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	0.0	12.18	30.00	5.37	0.659		-134	5.76		
1402	0.4	12.21	30.52	5.47	0.654		-144	4.29		
1407	0.8	12.23	30.87	5.52	0.650		-148	3.40		
1412	1.2	12.25	31.47	5.58	0.642		-156	2.96		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM001	1415

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing — S/u bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: LP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C041-PZM036	Project Name:	COA 610
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/14/21
Depth to Water (ft):	13.33	One Well Volume (gal):	5.99
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	50.10	Length of time Purged (min)	30

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	
1444	0.0	13.31	32.39	7.48	1.24		-189	4.64		
1449	0.5	13.31	32.79	8.19	1.21		-266	4.11		
1454	1.0	13.31	32.89	8.96	1.20		-349	3.39		
1459	1.5	13.31	32.89	10.74	1.20		-438	3.12		
1504	2.0	13.31	32.87	10.91	1.20		-451	2.46		
1509	2.5	13.31	32.84	10.96	1.20		-454	2.29		
1514	3.0	13.31	32.81	10.99	1.20		-454	2.20		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM036	1520

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing — S/u bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: [illegible]

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C042-PZM004	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2101210
Depth to Product (ft):	NA	Date:	9/14/21
Depth to Water (ft):	8.30	One Well Volume (gal):	1.31
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	16.32	Length of time Purged (min)	25

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	
1255	0.0	8.33	27.99	7.73	0.686		-142	5.41		
1300	0.4	8.34	27.85	7.77	0.696		-132	4.95		
1305	0.8	8.34	27.70	7.86	0.707		-133	4.20		
1310	1.2	8.34	27.60	7.64	0.711		-124	3.36		
1315	1.6	8.34	27.66	7.71	0.694		-125	2.77		
1320	2.0	8.34	27.84	7.72	0.695		-126	2.39		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C042-PZM004	1330

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section. mod HEAVY Brush	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing 4 bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: LCP

Comments: mod heavy brush

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C056-PZP001	Project Name:	COA-GW
Well Diameter (in):	2	Project Number:	2010210
Depth to Product (ft):	NA	Date:	9/8/21
Depth to Water (ft):	14.33	One Well Volume (gal):	0.78
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	19.10	Length of time Purged (min)	30

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	
819	0.0	14.33	23.41	9.66	1.70		-48	16.0		
824	0.4	14.33	23.09	9.35	0.691		-19	9.40		
829	0.8	14.33	22.87	8.95	0.692		10	8.09		
834	1.2	14.33	22.73	8.73	0.690		23	6.33		
839	1.6	14.33	22.59	8.64	0.687		31	4.27		
844	2.0	14.33	22.51	8.59	0.697		38	3.74		
849	2.4	14.33	22.45	8.51	0.692		41	3.41		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C056-PZP001	855

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing — s/u bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: LLP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C057-PZP002	Project Name:	CoA (GW)
Well Diameter (in):	2	Project Number:	21010210
Depth to Product (ft):	NA	Date:	9/8/21
Depth to Water (ft):	14.70	One Well Volume (gal):	0.52
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	17.89	Length of time Purged (min)	20

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	
1123	0.0	14.83	26.48	9.10	0.599		-84	6.09		
1128	0.5	14.87	26.44	12.49	1.87		-178	4.74		
1133	1.0	14.90	26.04	12.73	1.91		-190	3.89		
1138	1.5	14.92	26.12	12.84	1.96		-196	3.16		
1143	2.0	14.95	26.29	12.87	1.98		-197	2.83		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C057PZP002	1145

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	✓
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: CP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C058-PZM001	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	21010210
Depth to Product (ft):	NA	Date:	9/8/21
Depth to Water (ft):	13.81	One Well Volume (gal):	.88
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	19.22	Length of time Purged (min)	45

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	
1206	0.0	13.81	27.98	11.14	1.64		-143	15.0		
1211	0.4	13.81	28.01	10.95	1.65		-140	10.7		
1226	0.8	13.81	28.14	10.75	1.63		-139	9.92		
1231	1.2	13.81	28.53	10.50	1.48		-138	8.40		
1236	1.6	13.81	28.89	10.09	1.10		-119	6.11		
1241	2.0	13.81	29.23	9.76	0.927		-97	5.55		
1246	2.4	13.81	29.62	9.51	0.872		-79	4.46		
1251	2.8	13.81	30.08	9.45	0.841		-64	4.09		
1256	3.2	13.81	30.42	9.38	0.832		-63	3.77		
1301	3.6	13.81	30.69	9.09	0.822		-45	3.16		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C058-PZM001	1305

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing s/u bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	Y
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	Y
Well permit is present	N

Sampled By: LMP

Comments: PH not stable
ORP not stable

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C055-PZM000	Project Name:	COA-GW
Well Diameter (in):	2	Project Number:	21010210
Depth to Product (ft):	NA	Date:	9/8/24
Depth to Water (ft):	13.46	One Well Volume (gal):	0.59
Product Thickness (ft):	NA	Flow Rate (mL/min)	75
Depth to Bottom (ft):	17.60	Length of time Purged (min)	25

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	
927	0.0	13.69	22.65	12.61	2.83		-87	10.7		
932	0.2	14.05	22.62	9.72	2.30		-88	8.43		
937	0.4	15.12	22.57	9.36	1.54		-47	6.64		
942	0.6	15.97	22.46	10.23	0.371		-21	5.49		
947	0.8	16.55	22.48	10.19	0.371		-21	5.19		
952	1.0	16.88	22.53	10.64	0.963		-12	4.89		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C055-PZM000	1000

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing — 5/8 bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: LLB

Comments: Well has poor recharge
Not stable

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C059-PZP002	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2101210
Depth to Product (ft):	NA	Date:	9/7/21
Depth to Water (ft):	15.00	One Well Volume (gal):	0.64
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	18.95	Length of time Purged (min)	35

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	
1453	0.0	15.00	27.23	9.35	1.33		-11	9.39		
1458	0.45	15.00	27.78	9.14	1.32		-2	7.01		
1503	0.90	15.00	28.11	9.09	1.31		0	4.69		
1508	1.35	15.00	28.73	9.03	1.29		1	3.90		
1513	1.80	15.00	29.16	8.76	1.28		5	3.35		
1518	2.25	15.00	29.47	8.55	1.29		7	2.86		
1523	2.70	15.00	30.06	8.47	1.29		8	2.42		
1528	3.15	15.00	30.50	8.45	1.30		6	2.09		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C059-PZP002	1535

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	N

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing S/4 bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: LVB

Comments: Have to get to well due to mud thickness

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C060-PZM001	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/8/21
Depth to Water (ft):	14.33	One Well Volume (gal):	0.68
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	18.90	Length of time Purged (min)	30

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	
1327	0.0	14.36	31.07	9.23	1.69		-199	7.11		
1332	0.5	14.37	30.66	9.00	1.62		-206	6.47		
1337	1.0	14.39	30.02	9.58	1.49		-226	6.00		
1342	1.5	14.41	29.56	9.73	1.46		-238	5.21		
1347	2.0	14.41	29.17	10.80	1.46		-289	4.92		
1352	2.5	14.41	28.92	10.83	1.47		-290	4.04		
1357	3.0	14.42	28.74	10.79	1.47		-286	3.64		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C060-PZM001	1400

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N	BTEX and naphthalene	Y
TPH-DRO			
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing — 3/4 Bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CLP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C093-PZM	Project Name:	COA GW IM
Well Diameter (in):	2	Project Number:	2010210
Depth to Product (ft):	NA	Date:	9/7/21
Depth to Water (ft):	9.61	One Well Volume (gal):	1.61
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	19.50	Length of time Purged (min)	45

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	
928	0.0	9.69	23.22	9.29	0.516	11.90	209	6.12		
933	0.45	9.73	23.81	10.05	0.576	10.09	-337	4.60		
938	0.90	9.77	24.21	10.43	0.595	8.59	-343	4.22		
943	1.35	9.83	25.01	12.04	0.642	6.54	-408	3.88		
948	1.80	9.89	26.20	11.24	0.682	1.82	-357	3.42		
953	2.25	9.94	26.49	10.43	0.452	1.27	-351	3.16		
958	2.70	10.01	26.61	8.44	0.368	2.19	-294	2.98		
1003	3.15	10.08	26.82	7.66	0.475	3.82	-263	2.74		
1008	3.60	10.19	27.01	9.38	0.490	3.05	-271	2.60		
1013	4.05	10.25	27.25	11.63	0.505	1.68	-279	2.48		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C093-PZM	1015

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing Casing bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: LMP

Comments: DO not working
PH not stable

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C0182-MWI	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2101021.0
Depth to Product (ft):	NA	Date:	9/15/21
Depth to Water (ft):	7.56	One Well Volume (gal):	7.49
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	53-52	Length of time Purged (min)	20

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	
801	0.0	7.56	21.13	7.87	0.735		-228	4.79		
806	0.4	7.56	21.00	7.90	0.732		-231	4.36		
811	0.8	7.56	20.99	7.90	0.733		-232	4.04		
816	1.2	7.56	20.98	7.95	0.726		-234	3.43		
821	1.6	7.56	21.02	8.02	0.727		-235	3.15		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0182-MWI	830

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping (sloping?)	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: LMP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO190-MW25	Project Name:	COA GW IM
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/7/21
Depth to Water (ft):	13.10	One Well Volume (gal):	11.12
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	24.22	Length of time Purged (min)	25

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	
1045	0.0	13.16	29.42	6.20	2.46		-166	12.1		
1050	0.4	13.19	28.89	6.25	2.41		-167	8.37		
1055	0.8	13.22	28.80	6.36	2.39		-174	6.99		
1100	1.2	13.24	28.64	6.44	2.37		-183	6.64		
1105	1.6	13.25	28.50	6.46	2.39		-181	6.27		
1110	2.0	13.29	28.45	6.42	2.38		-175	5.81		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO190-MW25	1115

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing — Casing bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: MP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO194-MW5	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	21010210
Depth to Product (ft):	NA	Date:	9/15/21
Depth to Water (ft):	13.70	One Well Volume (gal):	1.80
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	24.75	Length of time Purged (min)	45

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	
923	0.0	13.70	22.57	14.00	8.23		-282	8.63		
928	0.5	13.70	22.85	14.00	8.15		-313	7.80		
933	1.0	13.70	23.12	14.00	7.99		-248	7.05		
938	1.5	a	Attempted to fix			pH		5.25		
943	2.5	13.70	23.58	14.00	7.98		-286	5.03		
948	3.0	13.70	24.15	7.61	8.13		-40	4.58		
953	3.5	13.70	24.45	14.00	7.86		-341	4.21		
958	4.0	13.70	24.85	14.00	7.76		-526	3.88		
1003	4.5	13.70	25.26	14.00	7.71		-658	3.61		
1008	5.0	13.70	25.67	14.00	7.65		-667	3.30		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO194-MW5	1010

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO		BTEX and naphthalene	Y
TPH-DRO		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
O&G			
Total Cyanide			
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing — slu bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: CP

Comments: pH not working? → Checked pH in 4.0 solution and probe was good. ORP not stable

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C0195-MW5	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	21010210
Depth to Product (ft):	NA	Date:	9/15/21
Depth to Water (ft):	13.66	One Well Volume (gal):	4.02
Product Thickness (ft):	NA	Flow Rate (mL/min)	3.41
Depth to Bottom (ft):	38.33	Length of time Purged (min)	25

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	13.66	27.98	10.37	0.156		43	6.37		
1106	0.45	13.66	27.89	10.56	0.178		12	5.84		
1111	0.90	13.66	27.93	10.46	0.191		0	4.25		
1116	1.35	13.66	28.11	10.29	0.207		-1	3.83		
1121	1.80	13.66	28.20	10.25	0.210		-2	3.17		
1126	2.25	13.66	28.33	10.23	0.217		-4	2.78		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0195-MW5	1135

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	✓
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping (sloping?)	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: [signature]

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C0196-MW5	Project Name:	CCR GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/15/21
Depth to Water (ft):	13.01	One Well Volume (gal):	2.90
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	30.80	Length of time Purged (min)	25

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	
1225	0.0	13.01	29.26	13.39	1.67		-282	8.40		
1230	0.4	13.01	29.03	13.50	1.62		-295	7.11		
1235	0.8	13.01	28.48	13.53	1.61		-302	5.64		
1240	1.2	13.01	28.26	13.53	1.62		-302	4.27		
1245	1.6	13.01	28.11	13.55	1.65		-305	3.99		
1250	2.0	13.01	27.97	13.46	1.67		-304	3.57		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0196-MW5	1300

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	✓
Well Pad Condition	
Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing — s/a bolts	✓
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: LHP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO 198-MWS	Project Name:	NDA GW
Well Diameter (in):	2	Project Number:	2101210
Depth to Product (ft):	NA	Date:	9/15/24
Depth to Water (ft):	13.81	One Well Volume (gal):	3.95
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	38.02	Length of time Purged (min)	40

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	
1412	0.0	13.81	31.04	11.21	3.77		-138	5.05		
1417	0.4	13.81	30.70	10.39	3.92		-129	4.69		
1422	0.8	13.81	30.36	11.49	3.98		-160	4.16		
1427	1.2	13.81	30.26	11.31	3.98		-122	3.75		
1432	1.6	13.80	30.19	11.18	4.02		-91	3.49		
1437	2.0	13.80	30.13	10.90	4.02		-66	3.22		
1442	2.4	13.80	30.11	11.13	4.04		-72	2.89		
1447	2.8	13.80	30.13	11.10	4.04		-65	2.74		
1452	3.2	13.80	30.15	11.11	4.03		-64	2.65		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO198-MWS	1500

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	Y		
TPH-DRO		BTEX and naphthalene	N
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing — Slu bolts	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO201-MWS	Project Name:	COA 640
Well Diameter (in):	2	Project Number:	2401021D
Depth to Product (ft):	NA	Date:	9/5/24
Depth to Water (ft):	12.54	One Well Volume (gal):	3.76
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	35.58	Length of time Purged (min)	20

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	0.0	12.55	28.63	12.31	1.68		-133	4.10		
1331	0.5	12.55	29.96	12.67	1.63		-180	4.01		
1336	1.0	12.55	29.18	12.75	1.61		-191	3.74		
1341	1.5	12.55	29.60	12.82	1.59		-205	3.60		
1346	2.0	12.55	30.23	12.85	1.57		-210	3.43		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO201-MWS	1350

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	✓
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing S/u bolts	✓
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	GD01-MW1	Project Name:	COAGW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/16/21
Depth to Water (ft):	34.96	One Well Volume (gal):	2.36
Product Thickness (ft):	NA	Flow Rate (mL/min)	454
Depth to Bottom (ft):	49.44	Length of time Purged (min)	45

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	
1421	0.0	34.96	20.95	8.54	11.9		-197	3.19		
1426	0.6	34.96	18.93	2.88	12.1		-40	2.95		
1431	1.2	34.96	18.96	8.51	12.1		-286	2.49		
1436	1.8	34.96	22.17	6.77	11.6		-127	2.20		
1441	2.4	34.96	21.62	6.68	11.7		-144	2.06		
1446	3.0	34.96	20.14	6.59	11.9		-168	1.80		
1451	3.6	34.96	19.10	7.05	11.3		-236	1.65		
1456	4.2	34.96	18.96	6.29	9.58		-174	1.51		
1501	4.8	34.96	20.60	6.97	0.016		-123	1.45	Inverter popped off	
1506	5.4	34.96	18.31	5.99	9.24		-168	1.42		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
GD01-MW1	1510

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO	Y	BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	✓
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	EM

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: LMP

Comments: Submersible pump

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	GD02-MWI	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	9/16/21
Depth to Water (ft):	19.74	One Well Volume (gal):	4.87
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	49.63	Length of time Purged (min)	30

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	0.0	19.76	22.86	7.49	0.431		84	9.09		
1008	0.4	19.78	22.92	7.14	0.443		90	7.05		
1013	0.8	19.78	23.11	7.25	0.452		64	5.64		
1018	1.2	19.78	23.32	7.38	0.468		43	4.83		
1023	1.6	19.79	23.72	7.36	0.472		-123	3.94		
1028	2.0	19.79	24.22	7.32	0.473		-129	3.26		
1033	2.4	19.79	24.63	7.26	0.474		-135	2.87		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
GD02-MWI	1035

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	✓
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	FM

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: CP

Comments:

Quarter 4 2021

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C023-PZM008	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2010210
Depth to Product (ft):	NA	Date:	12/2/21
Depth to Water (ft):	15.25	One Well Volume (gal):	1.13
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	22.16	Length of time Purged (min)	25

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	
1027	0.0	15.25	14.30	8.87	3.02	0.84	-455	5.21		
1032	0.4	15.25	14.54	8.98	2.45	0.74	-459	4.75		
1037	0.8	15.25	14.68	8.97	2.28	0.68	-460	4.22		
1042	1.2	15.25	14.83	8.97	2.21	0.65	-463	3.71		
1047	1.6	15.25	15.00	8.95	2.16	0.58	-467	3.50		
1052	2.0	15.25	15.02	8.94	2.17	0.63	-471	3.37		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C023-PZM008	1100

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	NA
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CAP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO24-PZM007	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2101210
Depth to Product (ft):	NA	Date:	12/2/21
Depth to Water (ft):	14.29	One Well Volume (gal):	1.20
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	22.20	Length of time Purged (min)	40

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	
902	0.00	14.80	15.98	6.82	1.41	1.95	-299	7.93		
907	0.45	14.82	15.87	8.34	1.43	1.68	-358	6.17		
912	0.90	14.83	15.68	9.01	1.44	1.10	-406	5.42		
917	1.35	14.84	15.42	9.12	1.44	0.97	-425	4.85		
922	1.80	14.85	15.19	8.75	1.45	1.03	-366	4.46		
927	2.25	14.87	14.95	8.57	1.46	1.47	-368	3.92		
932	2.70	14.88	14.70	7.54	1.47	1.57	-371	3.58		
937	3.15	14.89	14.54	7.63	1.48	1.81	-380	3.35		
942	3.60	14.90	14.41	7.61	1.50	1.73	-375	3.19		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO24-PZM007	945

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	NA

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: CSP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C026-P2M007	Project Name:	CoA GW
Well Diameter (in):	2	Project Number:	2101220
Depth to Product (ft):	NA	Date:	12/2/21
Depth to Water (ft):	11.77	One Well Volume (gal):	1.24
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	19.30	Length of time Purged (min)	30

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	
1318	0.0	12.21	18.98	9.00	1.52	0.99	-390	16.8		
1323	0.4	13.46	18.73	9.22	0.655	0.78	-324	8.30		
1328	0.8	14.11	18.63	7.12	0.662	0.89	-329	6.81		
1333	1.2	15.39	18.59	7.30	0.699	0.96	-344	4.49		
1338	1.6	16.24	18.44	7.40	0.842	0.99	-350	4.22		
1343	2.0	17.60	18.40	7.47	0.873	1.01	-355	3.95		
1348	2.4	18.10	18.37	7.52	0.899	1.10	-361	3.89		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C026-P2M007	1350

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	✓

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	N

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: MP

Comments: Cant replace bolts due to sediment
Needs pad redone ground level
1' + above cover

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C027-PZM012	Project Name:	CDA GW
Well Diameter (in):	2	Project Number:	21010210
Depth to Product (ft):	NA	Date:	11/16/21
Depth to Water (ft):	4.85	One Well Volume (gal):	2.05
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	17.42	Length of time Purged (min)	25

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	
1139	0.0	4.85	17.61	6.90	1.60	0.79	-384	4.88		
1144	0.4	4.86	17.44	6.70	1.32	0.56	-375	4.26		
1149	0.8	4.87	17.41	6.99	1.23	0.57	-364	3.75		
1154	1.2	4.87	17.42	6.79	1.19	0.57	-372	3.40		
1159	1.6	4.88	17.29	6.72	1.17	0.56	-367	3.22		
1204	2.0	4.86	17.42	6.63	1.14	0.54	-360	3.03		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C027-PZM012	1210

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO		BTEX and naphthalene	Y
TPH-DRO		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
O&G			
Total Cyanide			
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	NA
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	N
Well Condition: Lid cracked in Half	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: MP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C027-PZM046	Project Name:	COAGW
Well Diameter (in):	2	Project Number:	2190210
Depth to Product (ft):	NA	Date:	11/16/21
Depth to Water (ft):	7.47	One Well Volume (gal):	7.14
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	51.28	Length of time Purged (min)	35

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	
1044	0.00	7.47	18.22	12.76	0.994	3.57	-467	19.21		
1049	0.45	7.47	18.02	12.87	1.02	0.76	-519	17.05		
1054	0.90	7.47	17.91	13.04	1.02	0.58	-534	14.22		
1059	1.35	7.47	17.81	12.90	1.03	0.50	-529	13.10		
1104	1.80	7.47	17.74	12.96	1.03	0.46	-544	11.95		
1109	2.25	7.47	17.61	12.96	1.04	0.42	-551	10.74		
1114	2.70	7.47	17.60	12.96	1.04	0.41	-560	9.98		
1119	3.15	7.47	17.63	12.96	1.04	0.40	-569	9.12		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C027-PZM046	1130

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO		BTEX and naphthalene	Y
TPH-DRO			
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C030-PZM015	Project Name:	COA 640
Well Diameter (in):	2	Project Number:	210102
Depth to Product (ft):	NA	Date:	12/8/21
Depth to Water (ft):	12.44	One Well Volume (gal):	2.47
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	27.62	Length of time Purged (min)	20

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	
1206	0.0	12.45	11.26	10.81	2.47	1.40	-405	6.28		
1211	0.45	12.45	11.03	10.96	2.46	0.80	-424	5.51		
1216	0.90	12.45	10.79	10.95	2.39	0.82	-391	4.95		
1221	1.35	12.45	10.66	10.93	2.35	0.80	-381	4.64		
1226	1.80	12.45	10.46	10.90	2.26	0.80	-374	4.47		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C030-PZM015	1230

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	NA
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C036-PZM008	Project Name:	COA
Well Diameter (in):	2	Project Number:	260102.00
Depth to Product (ft):	NA	Date:	11/16/21
Depth to Water (ft):	7.05	One Well Volume (gal):	1.16
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	14.15	Length of time Purged (min)	35

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	
1216	0.0	7.26	19.44	8.10	1.64	5.34	-243	4.34		
1221	0.45	7.44	19.15	12.66	1.40	0.82	-469	3.81		
1226	0.90	7.60	19.07	13.54	1.34	0.72	-503	3.57		
1231	1.35	7.76	19.06	13.59	1.32	0.60	-505	3.28		
1236	1.80	7.90	19.07	13.37	1.28	0.59	-480	2.92		
1241	2.25	8.08	19.14	13.15	1.27	0.61	-476	2.64		
1246	2.70	8.20	19.21	13.10	1.26	0.54	-474	2.57		
1251	3.15	8.33	19.31	13.13	1.26	0.57	-472	2.48		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C036-PZM008	1300

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	NA
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: [signature]

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C036-P2M043	Project Name:	COA
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	11/16/24
Depth to Water (ft):	7.55	One Well Volume (gal):	7.26
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	52.10	Length of time Purged (min)	20

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	0.0	7.62	19.61	13.36	2.00	0.63	-476	12.14		
1350	0.5	7.67	19.63	13.38	2.00	0.42	-507	11.26		
1355	1.0	7.73	19.63	13.39	2.00	0.37	-524	10.38		
1400	1.5	7.78	19.63	13.39	2.00	0.36	-527	9.42		
1405	2.0	7.81	19.60	13.38	2.00	0.34	-532	8.67		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C036P2M043	1410

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO		BTEX and naphthalene	Y
TPH-DRO		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
O&G			
Total Cyanide			
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	NA

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: LMP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C037-PZM038	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2101240
Depth to Product (ft):	NA	Date:	12/1/21
Depth to Water (ft):	12.75	One Well Volume (gal):	5.06
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	43.85	Length of time Purged (min)	25

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	
754	0.0	12.75	18.70	5.64	1.53	0.99	-284	4.83		
759	0.5	12.75	17.13	9.23	1.71	0.64	-442	4.29		
804	1.0	12.75	16.17	9.25	1.82	0.57	-491	4.02		
809	1.5	12.75	15.40	9.38	1.91	0.55	-501	3.66		
814	2.0	12.75	14.53	9.47	1.98	0.52	-502	3.49		
819	2.5	12.75	13.52	9.43	2.03	0.51	-502	3.38		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C037-PZM038	825

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	NA
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CVP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C038-PZM006	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	11/30/2
Depth to Water (ft):	6.70	One Well Volume (gal):	1.47
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	15.70	Length of time Purged (min)	40

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	0.0	6.70	11.25	7.34	2.30	1.41	-468	17.1		
1244	0.4	6.70	11.42	6.82	1.71	0.99	-419	15.8		
1249	0.8	6.70	11.57	6.96	0.922	0.94	-394	13.3		
1254	1.2	6.70	11.66	7.85	0.755	0.71	-381	10.6		
1259	1.6	6.70	11.71	9.31	0.674	0.98	-371	8.99		
1304	2.0	6.70	11.80	6.86	2.28	0.96	-414	7.93		
1309	2.4	6.70	11.90	6.70	2.28	0.95	-422	7.05		
1314	2.8	6.70	12.09	6.75	2.27	0.67	-430	6.69		
1319	3.2	6.70	12.31	6.81	2.26	0.62	-436	6.39		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM006	1325

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	NA
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CR

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C038-PZM043	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210282.10
Depth to Product (ft):	NA	Date:	11/30/21
Depth to Water (ft):	7.45	One Well Volume (gal):	6.90
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	49.84	Length of time Purged (min)	35

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	
1406	0.0	7.48	12.61	4.24	1.19	0.73	-308	5.28		
1411	0.45	7.53	12.68	4.48	1.19	0.61	-318	4.93		
1416	0.90	7.57	12.69	4.62	1.19	0.61	-324	4.61		
1421	1.35	7.65	12.69	4.75	1.18	0.60	-329	4.26		
1426	1.80	7.69	12.67	4.99	1.19	0.59	-338	3.99		
1431	2.25	7.75	12.61	5.25	1.20	0.58	-347	3.68		
1436	2.70	7.86	12.59	5.29	1.20	0.57	-348	3.47		
1441	3.15	7.99	12.54	5.37	1.20	0.57	-357	3.36		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C038-PZM043	1450

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	NA
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: [signature]

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C039-PZM007	Project Name:	COATGW
Well Diameter (in):	2	Project Number:	2101210
Depth to Product (ft):	NA	Date:	11/16/21
Depth to Water (ft):	6.39	One Well Volume (gal):	1.87
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	17.89	Length of time Purged (min)	30

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	
843	0.0	6.39	15.95	12.97	3.21	3.45	-546	5.14		
848	0.5	6.39	15.93	13.14	3.10	*1.49	-565	4.26		
853	1.0	6.39	16.35	13.14	3.02	1.00	-578	3.92		
858	1.5	6.39	16.76	13.16	2.93	0.86	-603	3.40		
903	2.0	6.39	17.15	13.09	2.84	0.74	-594	2.99		
908	2.5	6.39	17.36	13.06	2.80	0.68	-595	2.78		
913	3.0	6.39	17.48	13.03	2.79	0.64	-595	2.42		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZM007	915

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	NA

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: MW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C039-PZMW42	Project Name:	COA (GW)
Well Diameter (in):	2	Project Number:	2101210
Depth to Product (ft):	NA	Date:	11/16/21
Depth to Water (ft):	8.42	One Well Volume (gal):	6.12
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	45.95	Length of time Purged (min)	20

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	
941	0.0	8.42	18.05	14.00	2.62	2.09	-658	3.09		
946	0.45	8.42	18.02	14.00	2.65	0.68	-660	3.00		
951	0.90	8.42	18.08	14.00	2.67	0.50	-662	2.72		
1006	1.35	8.42	18.14	14.00	2.69	0.47	-670	2.56		
1011	1.80	8.42	18.25	14.00	2.69	0.47	-671	2.38		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C039-PZMW42	1020

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO	N	BTEX and naphthalene	Y
TPH-DRO			
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	N/A

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C040-pzm008	Project Name:	COA
Well Diameter (in):	2	Project Number:	2101210
Depth to Product (ft):	NA	Date:	11/16/21
Depth to Water (ft):	6.46	One Well Volume (gal):	1.84
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	17.76	Length of time Purged (min)	40

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	6.49	18.99	9.67	2.39	3.62	-341	13.9		
1434	0.45	6.49	18.48	9.36	2.65	1.03	-381	12.42		
1439	0.90	6.50	18.08	9.22	2.72	0.81	-396	10.29		
1444	1.35	6.51	17.52	8.83	2.81	0.65	-403	9.79		
1449	1.80	6.51	17.15	9.06	2.86	0.58	-415	8.69		
1454	2.25	6.52	16.68	8.90	2.91	0.52	-437	8.02		
1459	2.70	6.53	16.24	9.18	2.96	0.49	-462	7.47		
1504	3.15	6.54	15.99	9.24	3.00	0.47	-470	6.94		
1509	3.60	6.55	15.79	9.16	3.03	0.45	-474	6.58		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C040-pzm008	1515

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	NA
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C041-PZM001	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NR	Date:	12/12/24
Depth to Water (ft):	12.99	One Well Volume (gal):	0.5
Product Thickness (ft):	NR	Flow Rate (mL/min)	303
Depth to Bottom (ft):	16.05	Length of time Purged (min)	35

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	
1026	0.0	13.02	10.73	6.72	0.712	3.09	-185	4.50		
1031	0.4	13.04	10.75	7.49	0.796	0.78	-287	3.94		
1036	0.8	13.07	10.91	7.60	0.797	0.62	-317	3.52		
1041	1.2	13.09	11.11	7.56	0.777	0.52	-357	3.10		
1046	1.6	13.11	11.43	7.27	0.698	0.49	-421	2.79		
1051	2.0	13.13	11.48	7.67	0.693	0.49	-447	2.51		
1056	2.4	13.14	11.57	7.73	0.667	0.48	-452	2.30		
1101	2.8	13.16	11.70	7.77	0.656	0.47	-458	2.22		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C041-PZM001	1110

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	NA
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CH

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	COAL-PZM036	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	12/1/21
Depth to Water (ft):	14.07	One Well Volume (gal):	5.89
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	50.20	Length of time Purged (min)	25

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	
1154	0.0	14.07	12.30	10.40	1.54	0.58	-568	10.6		
1159	0.5	14.07	12.59	9.32	1.82	0.45	-590	9.42		
1204	1.0	14.07	12.76	9.33	1.83	0.43	-595	8.69		
1209	1.5	14.07	12.94	9.35	1.82	0.41	-599	8.14		
1214	2.0	14.07	13.15	9.38	1.78	0.40	-601	7.61		
1219	2.5	14.07	13.26	9.38	1.82	0.40	-600	7.04		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
COAL-PZM036	1220

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	NA
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CW

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C042-PZM004	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2010240
Depth to Product (ft):	NA	Date:	12/1/21
Depth to Water (ft):	8.12	One Well Volume (gal):	1.34
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	16.36	Length of time Purged (min)	35

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	
910	0.0	8.41	11.61	7.72	0.893	1.61	-123	7.59		
915	0.45	8.75	11.52	6.28	0.908	1.19	-163	6.02		
920	0.90	8.92	11.56	5.51	0.910	0.81	-171	5.51		
925	1.35	9.26	11.59	6.01	0.910	0.73	-209	4.79		
930	1.80	9.60	11.59	6.79	0.907	0.66	-256	4.36		
935	2.25	10.02	11.58	7.24	0.906	0.64	-292	3.94		
940	2.70	10.39	11.55	7.33	0.904	0.59	-301	3.75		
945	3.15	10.70	11.51	7.40	0.904	0.57	-308	3.64		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C042-PZM004	950

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs	Y	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	NA
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: LLP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C055-PZM000	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2010210
Depth to Product (ft):	NA	Date:	12/2/21
Depth to Water (ft):	14.61	One Well Volume (gal):	0.41
Product Thickness (ft):	NA	Flow Rate (mL/min)	114
Depth to Bottom (ft):	17.14	Length of time Purged (min)	10

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	
840	0.0	15.77	20.43	8.92	1.69	1.65	-280	14.8		
845	0.15	16.13	20.07	8.80	1.67	1.39	-272	10.6		
850	0.3	16.61	19.41	8.61	2.20	1.41	-343	9.7		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C055-PZM000	850

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	X
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	NA
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: LM

Comments: Took sample prior to stabilization due to quick drawdown on lowest speed

Well usually runs dry before 15 min

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C056 PZP001	Project Name:	COATGW
Well Diameter (in):	2	Project Number:	40160210
Depth to Product (ft):	NA	Date:	12/1/21
Depth to Water (ft):	15.50	One Well Volume (gal):	0.59
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	19.15	Length of time Purged (min)	45

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	15.50	15.32	11.56	2.11	1.73	-445	6.86		
1412	0.45	15.50	15.45	11.30	2.18	0.81	-297	5.60		
1417	0.90	15.50	15.50	11.27	2.17	0.59	-274	4.99		
1422	1.35	15.50	15.58	11.15	2.16	0.44	-250	4.46		
1427	1.80	15.50	15.61	11.09	2.16	0.43	-243	4.09		
1432	2.25	15.50	15.67	11.08	2.17	0.39	-237	3.62		
1437	2.70	15.50	15.84	11.23	2.16	0.36	-331	3.27		
1442	3.15	15.50	15.95	11.10	2.16	0.36	-325	3.03		
1447	3.60	15.50	16.03	11.12	2.15	0.35	-317	2.90		
1452	4.05	15.50	16.20	11.12	2.15	0.34	-309	2.85		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C056-PZP001	1500

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	Y	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	NA

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CM

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C057-PZP002	Project Name:	CAA (GLA)
Well Diameter (in):	2	Project Number:	210102.0
Depth to Product (ft):	NA	Date:	11/7/21
Depth to Water (ft):	16.33	One Well Volume (gal):	0.28
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	18.05	Length of time Purged (min)	20

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	
1245	0.0	16.50	18.87	8.31	1.40	8.08	-251	17.1		
1250	0.4	16.84	11.64	8.09	1.69	8.76	-269	17.5		
1255	0.8	17.08	13.29	8.04	1.58	5.77	-259	13.3		
1300	1.2	17.37	13.66	7.96	1.68	5.82	-250	12.8		
1305	1.6	17.79	13.31	7.90	1.67	6.00	-242	11.9		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C057-PZP002	1315

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury **(total)**			
TAL Metals and Mercury **(dissolved)**			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	NA

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	

Sampled By: CP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C058-PZM001	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	12/2/21
Depth to Water (ft):	13.92	One Well Volume (gal):	0.87
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	19.27	Length of time Purged (min)	25

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	
1416	0.0	13.92	17.68	10.27	2.21	1.76	-378	3.29		
1421	0.4	13.92	17.40	10.05	1.95	1.20	-357	2.75		
1426	0.8	13.92	17.29	9.94	1.75	1.38	-337	2.38		
1431	1.2	13.92	17.13	9.94	1.57	1.48	-328	2.19		
1436	1.6	13.92	17.13	10.02	1.60	1.31	-333	2.00		
1441	2.0	13.92	17.25	10.10	1.62	1.08	-341	1.88		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C058-PZM001	1445

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Sampled By: CP

Comments:

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	NA

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C059-PZP002	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	12/7/21
Depth to Water (ft):	16.26	One Well Volume (gal):	0.45
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	19.00	Length of time Purged (min)	35

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	
1404	0.0	16.29	12.60	8.40	2.01	4.44	-268	5.40		
1409	0.4	16.31	12.31	7.91	2.06	2.20	-249	4.95		
1414	0.8	16.34	12.13	7.89	1.99	1.70	-236	4.48		
1419	1.2	16.36	11.92	6.77	1.92	1.36	-229	3.94		
1424	1.6	16.38	11.28	6.72	1.90	1.20	-232	3.51		
1429	2.0	16.41	11.04	6.59	1.92	1.10	-231	3.27		
1434	2.4	16.42	10.95	6.55	1.94	1.02	-232	3.00		
1439	2.8	16.45	10.86	6.61	1.97	1.07	-238	2.86		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C059-PZP002	1450

Sampling Parameters			
Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO		BTEX and naphthalene	Y
TPH-DRO		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
O&G			
Total Cyanide			
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	N
Well Pad Condition	
Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	NA
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CP

Comments: Heavy mud - hard to access

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C060-PZP001	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2101210
Depth to Product (ft):	NA	Date:	12/2/21
Depth to Water (ft):	5.45	One Well Volume (gal):	0.57
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	18.96	Length of time Purged (min)	20

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	15.46	14.74	8.13	2.58	1.90	-415	3.18		
1138	0.45	15.46	14.84	8.13	2.46	1.26	-427	2.99		
1143	0.90	15.46	15.18	8.40	2.27	0.92	-427	2.14		
1148	1.35	15.46	15.35	8.48	2.19	0.81	-421	2.58		
1153	1.80	15.46	15.62	8.49	2.08	0.81	-413	2.49		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C060-PZP001	1210

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO		BTEX and naphthalene	Y
TPH-DRO		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
O&G			
Total Cyanide			
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	N

Sampled By: CVP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C093-PZM	Project Name:	COC GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	12/9/21
Depth to Water (ft):	10.91	One Well Volume (gal):	1.41
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	19.54	Length of time Purged (min)	40

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	
840	0.0	10.98	15.63	2.58	0.481	2.30	-395	8.14		
845	0.4	11.00	15.30	2.43	0.538	2.27	-363	7.39		
850	0.8	11.03	14.62	6.71	0.656	2.10	-521	6.60		
855	1.2	11.07	14.33	6.98	0.737	1.92	-520	5.71		
900	1.6	11.11	13.94	7.07	0.778	1.88	-520	5.06		
905	2.0	11.14	13.68	8.00	0.894	1.66	-541	4.57		
910	2.4	11.18	13.61	8.30	0.885	1.63	-569	4.14		
915	2.8	11.21	13.62	8.39	0.905	1.60	-575	3.94		
920	3.2	11.24	13.71	8.45	0.920	1.50	-582	3.76		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C093-PZM	925

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	✓
Bolts in place	
Bolts are missing	NA

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: [signature]

Comments:

1050

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C0182-MW1	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	12/1/21
Depth to Water (ft):	8.47	One Well Volume (gal):	7.35
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	53.55	Length of time Purged (min)	30

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	
1306	0.0	8.47	15.87	1.91	0.759	3.17	-140	8.10		
1311	0.5	8.47	15.86	3.85	0.761	0.87	-227	7.32		
1316	1.0	8.47	15.88	6.03	0.760	0.63	-319	6.95		
1321	1.5	8.47	15.85	7.61	0.761	0.48	-376	6.24		
1326	2.0	8.47	15.78	7.54	0.763	0.43	-372	5.98		
1331	2.5	8.47	15.70	7.59	0.766	0.39	-371	5.66		
1336	3.0	8.47	15.66	7.66	0.767	0.36	-375	5.31		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0182-MW1	1345

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	✓
Well Pad Condition	
Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	NA
Bolts are missing	
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: CP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C0190-MW5	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	12/9/21
Depth to Water (ft):	14.57	One Well Volume (gal):	1.52
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	23.85	Length of time Purged (min)	20

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	
1010	0.0	14.52	14.02	3.79	2.14	4.02	-386	5.89		
1015	0.45	14.52	13.79	3.93	1.76	1.31	-355	4.98		
1020	0.90	14.52	13.64	4.01	1.72	1.11	-353	4.52		
1025	1.35	14.52	13.40	4.07	1.74	1.03	-353	4.29		
1030	1.80	14.52	13.18	4.10	1.76	0.96	-353	4.10		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0190-MW5	1040

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	NA
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: CM

Comments: Well has an rusty colored coating covering PVC, casing + pad

Cap doesn't seat all the way

Well overflows?

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO194-MWS	Project Name:	COA GID
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	12-8-21
Depth to Water (ft):	14.55	One Well Volume (gal):	1.67
Product Thickness (ft):	NA	Flow Rate (mL/min)	341
Depth to Bottom (ft):	24.81	Length of time Purged (min)	25

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	
845	0.0	14.58	12.94	11.01	8.40	4.26	-389	3.09		
850	0.45	14.61	12.26	9.07	8.95	2.06	-343	2.70		
855	0.90	14.64	11.93	11.23	8.88	1.33	-436	2.21		
900	1.35	14.66	11.57	11.26	8.93	1.07	-437	1.93		
905	1.80	14.69	11.19	11.33	9.00	0.94	-440	1.80		
910	2.25	14.72	11.06	11.35	9.08	0.90	-445	1.71		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO194-MWS	915

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO		BTEX and naphthalene	Y
TPH-DRO		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
O&G			
Total Cyanide			
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection	
Well has been found and is accessible without hazards. If no, explain in the comments section.	Y
Well Pad Condition	
Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	NA
Well Casing Condition	
Casing is free from damage and visibly marked with the Well ID	✓
Well Condition	
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)	
Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: LLP

Comments: Resample

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C0195-MW5	Project Name:	COA (GW)
Well Diameter (in):	2	Project Number:	260102.10
Depth to Product (ft):	NA	Date:	12/8/21
Depth to Water (ft):	14.59	One Well Volume (gal):	3.88
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	38.40	Length of time Purged (min)	25

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	
1422	0.0	14.60	13.90	11.26	2.21	2.67	-427	3.91		
1427	0.5	14.60	13.82	11.27	2.32	0.68	-421	3.49		
1432	1.0	14.60	13.76	11.28	2.34	0.54	-440	3.27		
1437	1.5	14.61	13.66	11.30	2.36	0.47	-425	3.19		
1442	2.0	14.61	13.54	11.29	2.37	0.47	-427	3.06		
1447	2.5	14.62	13.44	11.34	2.39	0.44	-436	2.92		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0195-MW5	1450

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	
Fair: some visible cracks and/or not sloping	✓
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: LR

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	CO196-MW5	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210102.10
Depth to Product (ft):	NA	Date:	12/8/21
Depth to Water (ft):	13.90	One Well Volume (gal):	2.76
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	30.86	Length of time Purged (min)	20

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	13.90	10.63	10.71	2.35	1.99	-420	10.02		
1010	0.5	13.90	11.50	10.74	2.29	1.26	-425	9.20		
1015	1.0	13.90	11.81	10.78	2.26	1.09	-425	8.37		
1020	1.5	13.90	11.98	10.81	2.24	0.99	-427	7.80		
1025	2.0	13.90	12.09	10.86	2.23	0.92	-420	7.25		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
CO196-MW5	1030

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	NA

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: [signature]

Comments: Resample

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C0198-MW5	Project Name:	COP GW
Well Diameter (in):	2	Project Number:	210102.10
Depth to Product (ft):	NA	Date:	12/8/21
Depth to Water (ft):	14.75	One Well Volume (gal):	3.29
Product Thickness (ft):	NA	Flow Rate (mL/min)	303
Depth to Bottom (ft):	38.03	Length of time Purged (min)	25

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	
1318	0.0	14.76	11.56	11.40	9.07	2.48	-398	2.01		
1323	0.4	14.77	12.08	11.67	9.59	1.04	-438	1.74		
1328	0.8	14.77	12.46	11.61	9.07	0.92	-428	1.62		
1333	1.2	14.78	12.57	11.73	9.28	0.61	-419	1.50		
1338	1.6	14.79	12.87	11.77	9.29	0.52	-425	1.44		
1343	2.0	14.80	13.06	11.76	9.26	0.50	-423	1.37		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0198-MW5	1345

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping — Some chipping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	NA
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: [signature]

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	C0201-MW5	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	2010210
Depth to Product (ft):	NA	Date:	12-8-21
Depth to Water (ft):	13.41	One Well Volume (gal):	3.62
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	35.62	Length of time Purged (min)	20

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	
1055	0.0	13.41	12.11	11.98	1.95	2.56	-436	6.93		
1100	0.5	13.41	12.04	11.30	2.04	0.99	-440	6.17		
1105	1.0	13.41	12.11	11.28	2.05	0.76	-446	5.44		
1110	1.5	13.41	12.13	11.26	2.05	0.67	-448	5.10		
1115	2.0	13.41	12.11	11.25	2.06	0.63	-449	4.82		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
C0201-MW5	1120

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs	N	Dissolved Zn and Cd	N
TPH-GRO			
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	NA

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: MP

Comments:

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	GD01-MW1	Project Name:	COA GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	12/9/21
Depth to Water (ft):	36.16	One Well Volume (gal):	2.17
Product Thickness (ft):	NA	Flow Rate (mL/min)	1136
Depth to Bottom (ft):	49.48	Length of time Purged (min)	15

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	
1312	0.0	36.17	17.66	5.44	10.1	1.13	-396	7.28		
1317	1.5	36.19	18.38	5.44	10.1	0.99	-424	6.43		
1322	3.0	36.20	18.44	5.43	10.1	0.97	-434	6.89		
1327	4.5	36.21	18.59	5.44	10.1	0.89	-442	6.32		
			Sub pump used							

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
GD01-MW1	1330

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	✓

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: LP

Comments: Resample

Low Flow Sampling Purge Log

ARM Group Enterprises LLC
Engineers and Scientists

Well Number:	GD02-MW1	Project Name:	COP GW
Well Diameter (in):	2	Project Number:	210210
Depth to Product (ft):	NA	Date:	12/9/21
Depth to Water (ft):	21.00	One Well Volume (gal):	4.68
Product Thickness (ft):	NA	Flow Rate (mL/min)	379
Depth to Bottom (ft):	49.70	Length of time Purged (min)	35

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	0.0	21.04	13.49	4.29	0.534	3.75	-166	40.6		
1422	0.5	21.06	13.93	4.27	0.482	2.06	-205	34.7		
1427	1.0	21.09	14.25	4.44	0.503	1.21	-322	31.4		
1432	1.5	21.12	14.41	4.88	0.641	0.81	-476	28.1		
1437	2.0	21.16	15.42	4.82	5.14	1.36	-534	25.3		
1442	2.5	21.19	15.45	4.85	5.51	1.23	-543	23.2		
1447	3.0	21.23	15.68	4.83	5.63	1.14	-548	21.1		
1452	3.5	21.26	15.64	4.86	5.72	1.09	-550	19.4		

SAMPLE RECORD AND WELL DETAILS

Sample ID	Time Collected
GD02-MW1	1455

Sampling Parameters

Parameter	Collected?	Parameter	Collected?
TCL-VOCs		Dissolved Zn and Cd	N
TPH-GRO	N		
TPH-DRO		BTEX and naphthalene	Y
O&G			
Total Cyanide		VOC, SVOC, TAL Metals and mercury, Sulfate, Nitrate, Ammonia, COD, Alkalinity, Chloride, Turbidity, TDS, Specific Conductance	N
TCL SVOCs			
TAL Metals and Mercury (total)			
TAL Metals and Mercury (dissolved)			
Hexavalent Chromium			
PCB			
Matrix Spike			
Duplicate			

Well Inspection

Well has been found and is accessible without hazards. If no, explain in the comments section.	Y

Well Pad Condition

Good: no visible cracks and is sloping	✓
Fair: some visible cracks and/or not sloping	
Poor: heavily cracked	
Unsure: pad has been buried by site activities	
Bolts in place	✓
Bolts are missing	

Well Casing Condition

Casing is free from damage and visibly marked with the Well ID	✓

Well Condition

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)

Well is structurally sound: not bent, broken, and no blockage identified	✓
Well is bent or broken but is able to be used	
Well is broken and is not able to be used	
Well is blocked and is not able to be used	
Cap is present	✓
Well permit is present	✓

Sampled By: CW

Comments: Resample

APPENDIX C

System Operations/Shut-Down Summary

JANUARY 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	2 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**
3 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	4 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	5 •Cell 1 **(Off)** •Cell 2 GW (On) Sampled •Cell 3 **(Off)** •Cell 5 (On)	6 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 **(Off)** Lead LGAC leaking	7 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	8 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On) Lead LGAC leak repaired	9 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 (On) Sulfuric acid and anti-scalent transferred
10 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	11 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On) Sampled	12 •Cell 1 **(Off)** •Cell 2 GW **(Off)** Inlet pump valves replaced •Cell 3 **(Off)** •Cell 5 (On) Sampled	13 •Cell 1 (On) - Repaired SVE joint •Cell 2 GW **(Off)** Inlet tank pump repairs •Cell 3 (On) •Cell 5 (On)	14 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	15 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	16 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 (On)
17 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	18 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	19 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5	20 •Cell 1 (On) •Cell 2 GW **(Off)** Inlet pump installed •Cell 3 (On) •Cell 5 (On)	21 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	22 •Cell 1 (On) - Sampled •Cell 2 GW **(Off)** •Cell 3 (On) Sampled •Cell 5 (On) Sampled	23 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 (On)
24 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	25 •Cell 1 (On) - Southern well field configuration •Cell 2 GW (On) Inlet pump wired in •Cell 3 (On) •Cell 5 (On)	26 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	27 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	28 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	29 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	30
31		**NOTES:**				

FEBRUARY 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	2 •Cell 1 **(Off)** •Cell 2 GW (On) Sampled •Cell 3 **(Off)** •Cell 5 (On) Sampled	3 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On) Sampled	4 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	5 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	6 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)
7 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** AS High Temperature alarm •Cell 5 (On)	9 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	10 •Cell 1 (On) - Sampled •Cell 2 GW (On) •Cell 3 (On) Sampled •Cell 5 (On) Sampled	11 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	12 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	13 •Cell 1 **(Off)** •Cell 2 GW (On •Cell 3 **(Off)** •Cell 5 (On)
14 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On).	15 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	16 •Cell 1 **(Off)** •Cell 2 GW (On) Submersible pumps cleaned •Cell 3 **(Off)** •Cell 5 (On)	17 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	18 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	19 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	20 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)
21 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	22 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	23 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	24 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	25 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	26 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (Off) •Cell 5 (On)	27 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)
28 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)						
		NOTES:				

MARCH 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1 •Cell 1 (On) - Sampled •Cell 2 GW (On) - Sampled •Cell 3 (On) •Cell 5 (On) Sampled	2 •Cell 1 **(Off)** •Cell 2 GW (On) - Sampled •Cell 3 **(Off)** •Cell 5 (On) Sampled	3 •Cell 1 (On) - Sampled •Cell 2 GW (On) •Cell 3 (On) Sampled •Cell 5 (On) Sampled	4 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On) Preventative maintenance	5 •Cell 1 **(On)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	6 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)
7 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	8 •Cell 1 **(Off)** - SVE blower down •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)** LGAC vessels drained	9 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)** LGAC vessel carbon change-out	10 •Cell 1 **(Off)** Replaced SVE blower air intake filter •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	11 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	12 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	13 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**
14 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	15 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	16 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	17 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	18 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	19 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	20 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**
21 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	22 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	23 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	24 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) Valve installation	25 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	26 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	27 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
28 •**Cell 1 (Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	29 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	30 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) AST influent totalizer installation	31 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)			
		NOTES:				

APRIL 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1 •Cell 1 **(Off)** Picked up repaired SVE blower •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On) Sampled	2 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) Sampled, PVC tee replaced	3 •Cell 1 (**Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) Plumbing work
4 •Cell 1 (On) SVE blower installed •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	5 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On)	6 •Cell 1 (On) •Cell 2 GW **(Off)** Inlet tank float switch failed •Cell 3 (On) Sampled •Cell 5 (On) Sampled	7 •Cell 1 (On) - Sampled •Cell 2 GW **(Off)** Inlet tank float switch installed •Cell 3 (On) •Cell 5 (On) Installed inlet tank headspace vent piping	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	9 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	10 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
11 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	12 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	13 •Cell 1 (On) - Sampled •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	14 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) VGAC vessels taken offline	15 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	16 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	17 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
18 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	19 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) Preventative maintenance •Cell 5 **(Off)** AST cleaning	20 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	21 •Cell 1 (On) - •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	22 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	23 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	24 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
25 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	26 •Cell 1 (On) •Cell 2 GW (On) AST cleaning •Cell 3 (On) •Cell 5 (On)	27 •Cell 1 (On) Sampled •Cell 2 GW **(Off)** AST cleaning •Cell 3 (On) •Cell 5 (On) LRP hydraulic oil changed	28 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	29 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	30 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	
		NOTES:				

MAY 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
2 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	3 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	4 •Cell 1 (On) - Sampled •Cell 2 GW (On) Defoamer pump maintenance •Cell 3 (On) •Cell 5 (On) Sampled	5 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On) Sampled, new effluent vapor stack installed	6 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On) Leaking ball valve replaced	7 •Cell 1 (On) Southern wellfield configuration •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) Two leaking ball valves replaced	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
9 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	10 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	11 •Cell 1 (On) New UPS installed •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	12 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	13 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	14 •Cell 1 (On) Sampled •Cell 2 GW (On) •Cell 3 (On) Sampled •Cell 5 (On) Sampled	15 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
16 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	17 •Cell 1 (On) •Cell 2 GW (On) AST magnehelic gauge installed •Cell 3 (On) •Cell 5 (On)	18 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	19 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	20 •Cell 1 (On) •Cell 2 GW **(Off)** AST transfer pump valve string replacement •Cell 3 (On) •Cell 5 (On)	21 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	22 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)
23 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	24 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	25 •Cell 1 (On) •Cell 2 GW (Off) •Cell 3 (On) •Cell 5 (On) LRP preventative maintenance	26 •Cell 1 (On) •Cell 2 GW (On) AST valve string installed •Cell 3 **(Off)** Power Fault alarm •Cell 5 (On)	27 •Cell 1 (On) •Cell 2 GW (On) AST transfer pump electrical wiring work •Cell 3 (On) •Cell 5 (On) New oil mist filters installed	28 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	29 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
30 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	31 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	**NOTES:**				

JUNE 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1 •Cell 1 (On) •Cell 2 GW (On) - Sampled •Cell 3 (On) •Cell 5 (On) Sampled	2 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On) Sampled	3 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	4 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	5 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
6 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	7 •Cell 1 **(Off)** - SVE VFD alarm •Cell 2 GW (On) - Sampled •Cell 3 (On) •Cell 5 (On)	8 •Cell 1 **(Off)** SVE VFD fault alarm •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	9 •Cell 1 (On) Sampled, northern wellfield configuration •Cell 2 GW (On) •Cell 3 (On) Sampled •Cell 5 (On) Sampled	10 •Cell 1 (On) - Repaired SVE joint •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) LRP preventative maintenance	11 •Cell 1 (On) - •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	12 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
13 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	14 •Cell 1 (On) - Preventative maintenance •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	15 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) AST blower air intake cleaned	16 •Cell 1 (On) •Cell 2 GW **(Off)** Reinjection piping cleanout damaged •Cell 3 **(Off)** Overhead electric line downed by storm •Cell 5 (On)	17 •Cell 1 (On) •Cell 2 GW (On) Reinjection water piping cleanout repaired •Cell 3 (On) •Cell 5 (On)	18 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	19 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
20 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	21 •Cell 1 (On) •Cell 2 GW **(Off)** Reinjection water cleanout cap failed •Cell 3 (On) •Cell 5 (On) - Drum transfer, LGAC backwash	22 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	23 •Cell 1 (On) •Cell 2 GW (On) Reinjection water piping cleanout cap replaced •Cell 3 (On) •Cell 5 (On)	24 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	25 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	26 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
27 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	28 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) Preventative maintenance •Cell 5 (On)	29 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	30 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) New oil mist filters installed			
		NOTES:				

JULY 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1 •Cell 1 (On) •Cell 2 GW (On) - Sampled •Cell 3 (On) •Cell 5 (On) Sampled	2 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On) Sampled	3 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
4 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	5 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	6 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	7 •Cell 1 (On) - Sampled •Cell 2 GW (On) •Cell 3 (On) - •Cell 5 (On)	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	9 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** Power Fault alarm •Cell 5 (On)	10 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
11 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	12 •Cell 1 **(Off)** SVE joint repairs, southern wellfield configuration •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	13 •Cell 1 **(Off)** SVE joint repairs •Cell 2 GW (On) AST pitot tube cleaned •Cell 3 (On) •Cell 5 (On)	14 •Cell 1 (On) Sampled •Cell 2 GW (On) •Cell 3 (On) Sampled •Cell 5 (On) Sampled	15 •Cell 1 (On) •Cell 2 GW (On) New AST mist filter installed •Cell 3 (On) •Cell 5 (On)	16 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	17 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
18 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	19 •Cell 1 **(Off)** Pressure transmitter bad •Cell 2 GW **(Off)** - AST cleaning •Cell 3 (On) •Cell 5 (On)	20 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	21 •Cell 1 **(Off)** •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	22 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	23 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	24 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
25 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	26 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	27 •Cell 1 (On) Pressure transmitter replaced •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	28 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	29 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	30 •Cell 1 (On) •Cell 2 GW **(Off)** Defoamer pump failed •Cell 3 (On) •Cell 5 (On)	31 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)
		NOTES:				

AUGUST 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	2 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 **(On)** •Cell 5 (On) Sampled	3 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On) Sampled	4 •Cell 1 (On) Sampled •Cell 2 GW **(Off)** •Cell 3 (On) Sampled •Cell 5 (On) Sampled	5 •Cell 1 (On) •Cell 2 GW (On) New defoamer pump installed •Cell 3 (On) •Cell 5 (On)	6 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	7 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
8 •Cell 1 **(Off)** Power Fault alarm •Cell 2 GW (On) •Cell 3 **(Off)** Power Fault alarm •Cell 5 (On)	9 •Cell 1 (On) - •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On)	10 •Cell 1 **(Off)** •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On)	11 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	12 •Cell 1 **(Off)** •Cell 2 GW (On) EW-4 pump offline •Cell 3 (On) •Cell 5 (On)	13 •Cell 1 (On) Northern wellfield configuration •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off) COVID-related oi**l mist filter supply shortage, no oil mist filters available	14 •Cell 1 **(Off)** Power Fault alarm •Cell 2 GW (On) •Cell 3 **(Off)** Power Fault alarm •Cell 5 **(Off)**
15 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	16 •Cell 1 (On) - •Cell 2 GW (On) EW-4 pump troubleshooting •Cell 3 (On) •Cell 5 **(Off)**	17 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	18 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	19 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	20 •Cell 1 **(Off)** SVE VFD fault alarm •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	21 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**
22 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	23 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	24 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	25 •Cell 1 (On) •Cell 2 GW (On) EW-5 submersible pump cleaning •Cell 3 (On) •Cell 5 **(Off)**	26 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	27 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	28 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**
29 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	30 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	31 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**				
•Cell 1 **(Off)** •Cell 2 GW (On) •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	•Cell 1 (On) •Cell 2 GW (On) - Check valve replace •Cell 2 SVE **(Off)** •Cell 3 **(Off)** •Cell 5 (On) - Check valve replace, acid transfer	**NOTES:**				

SEPTEMBER 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 •Cell 1 (On) Sampled •Cell 2 GW (On) •Cell 3 (On) Sampled •Cell 5 **(Off)**	2 •Cell 1 **(Off)** •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 **(Off)**	3 •Cell 1 **(Off)** SVE VFD fault alarm •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 **(Off)**	4 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**
5 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	6 •Cell 1 **(Off)** •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	7 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	9 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	10 •Cell 1 (On) •Cell 2 GW (On) - Temporary outage •Cell 3 (On) •Cell 5 **(Off)**	11 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**
12 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	13 •Cell 1 (On) Southern wellfield configuration •Cell 2 GW (ON) •Cell 3 (On) •Cell 5 (On) New oil mist filters received and installed	14 •Cell 1 (On) - •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) Sampled	15 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) Sampled	16 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	17 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	18 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
19 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	20 •Cell 1 **(Off)** SVE Low Pressure alarm •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	21 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	22 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) New hose built and installed on lead LGAC vessel	23 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	24 •Cell 1 (On) Northern wellfield configuration •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	25 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
26 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	27 •Cell 1 (On) •Cell 2 GW **(Off)** EW-5 submersible pump and AST mist filter cleaning •Cell 3 (On) •Cell 5 (On)	28 •Cell 1 (On) •Cell 2 GW **(Off)** AST transfer pump float stem failed •Cell 3 (On) •Cell 5 (On)	29 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	30 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)		
		NOTES:				

OCTOBER 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	2 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)
3 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	4 •Cell 1 (On) Sampled •Cell 2 GW **(Off)** •Cell 3 (On) Sampled •Cell 5 (On)	5 •Cell 1 (On) •Cell 2 GW (On) AST transfer pump float stem installed •Cell 3 (On) •Cell 5 **(Off)** Two extraction wells damaged	6 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 **(Off)** New oil mist filter installed	7 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 **(Off)** Area excavated around damaged extraction wells	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	9 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**
10 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	11 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	12 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)** Repaired damaged extraction well wellheads. LRP hydraulic oil changed	13 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	14 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 **(Off)**	15 •Cell 1 (On) •Cell 2 GW **(Off)** Immediately sampled when exceedences discovered then turned off •Cell 3 (On) •Cell 5 **(Off)**	16 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 **(Off)**
17 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 **(Off)**	18 •Cell 1 (On) •Cell 2 GW **(Off)** AST cleaning •Cell 3 (On) •Cell 5 (On)	19 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 (On) •Cell 5 (On)	20 •Cell 1 (On) Power fault alarm •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	21 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On) - Installed new vault over repaired extraction well	22 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On)	23 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)
24 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	25 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 (On) •Cell 5 (On) - Transferred sulfuric acid and anti-scalent	26 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (On) •Cell 5 (On)	27 •Cell 1 (On) •Cell 2 GW (On) AST influent totalizer installation •Cell 3 (On) •Cell 5 (On)	28 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** SVE blower failed •Cell 5 (On)	29 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	30 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (Off) •Cell 5 (On)
31 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (Off) •Cell 5 (On)		**NOTES:**				

NOVEMBER 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1 •Cell 1 (On) Sampled •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	2 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 **(Off)** •Cell 5 (On)	3 •Cell 1 (On) •Cell 2 GW (On) Sampled before effluent totalizer installation •Cell 3 **(Off)** •Cell 5 (On)	4 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	5 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	6 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)
7 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On) Installed new vault around repaired extraction well	9 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	10 •Cell 1 (On) •Cell 2 GW (On) - Sampled •Cell 3 **(Off)** •Cell 5 (On) Transferred sulfuric acid	11 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	12 •Cell 1 (On) •Cell 2 GW (Off) Plugged inlet bag filters •Cell 3 **(Off)** •Cell 5 (On)	13 •Cell 1 (On) •Cell 2 GW (Off) •Cell 3 **(Off)** •Cell 5 (On)
14 •Cell 1 (On) •Cell 2 GW (Off) •Cell 3 **(Off)** •Cell 5 (On)	15 •Cell 1 (On) •Cell 2 GW (On) Inlet bag filters changed •Cell 3 **(Off)** •Cell 5 (On) Excavation backfilled and extraction well CO69 brought back online	16 •Cell 1 (On) •Cell 2 GW (On) Tank cleaning •Cell 3 **(Off)** •Cell 5 (On)	17 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	18 •Cell 1 (On) •Cell 2 GW (On) MS tank float stem installation •Cell 3 **(Off)** •Cell 5 (On)	19 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	20 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)
21 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	22 •Cell 1 (On) •Cell 2 GW **(Off)** Influent tank bulkhead fitting failed •Cell 3 **(Off)** •Cell 5 (On)	23 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 (On)	24 •Cell 1 (On) •Cell 2 GW **(Off)** Influent tank bulkhead fitting installation •Cell 3 **(Off)** •Cell 5 (On)	25 •Cell 1 (On) •Cell 2 GW (On) Influent tank transfer pump valve string installation •Cell 3 **(Off)** •Cell 5 (On)	26 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (Off) •Cell 5 (On)	27 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)
28 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 (Off) •Cell 5 (On)	29 •Cell 1 (On) Southern wellfield configuration •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	30 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On) Transferred sulfuric acid				
		NOTES:				

DECEMBER 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 **(Off)** •Cell 5 (On)	2 •Cell 1 (On) •Cell 2 GW (On) Sampled •Cell 3 **(Off)** •Cell 5 (On)	3 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	4 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)
5 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 (On)	6 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)** Unrepairable leak discovered in lead LGAC vessel	7 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	8 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	9 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	10 •Cell 1 (On) - Sampled •Cell 2 GW (Off) MS tank transfer pump not actuating •Cell 3 **(Off)** •Cell 5 **(Off)**	11 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**
12 •Cell 1 (Off) Power fault alarm •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	13 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	14 •Cell 1 (On) •Cell 2 GW **(Off)** •Cell 3 **(Off)** •Cell 5 **(Off)**	15 •Cell 1 (On) •Cell 2 GW (On) New defoamer use initiated •Cell 3 **(Off)** •Cell 5 **(Off)**	16 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	17 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	18 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**
19 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	20 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	21 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	22 •Cell 1 (On) Preventative maintenance •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	23 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	24 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	25 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**
26 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	27 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	28 •Cell 1 (On) Northern wellfield configuration •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	29 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	30 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	31 •Cell 1 (On) •Cell 2 GW (On) •Cell 3 **(Off)** •Cell 5 **(Off)**	
		NOTES:				

APPENDIX D

Historical Data Summary

Appendix D
Cell 1 Historical Data Summary

Client Sample ID	Parameter	2/1/2013	5/1/2013	8/1/2013	12/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO190-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	42.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	148,000	NS	588,000	NS	NS	NS	NS	NS	155,000	427,000	763,000	299,000
CO190-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	49.5	NS	63.8	NS	NS	NS	NS	NS	9.5	40.6	68.6	21.1
CO190-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,200	NS	44,700	NS	NS	NS	NS	NS	8,510	28,300	54,400	15,900
CO190-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO190-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	437	NS	1,530	NS	NS	NS	NS	NS	194	988	1,540	503
CO190-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	39.8	NS	231	NS	NS	NS	NS	NS	97	74.4	315	98.1
CO191-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	107,000	NS	NS
CO191-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	243	NS	NS
CO191-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	19,600	NS	NS
CO191-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,730	NS	NS
CO191-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	271	NS	548	NS	NS	NS	NS	NS	NS	377	NS	NS

Appendix D
Cell 1 Historical Data Summary

Client Sample ID	Parameter	2/1/2013	5/1/2013	8/1/2013	12/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO93-PZM	1,1,1,2-Tetrachloroethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	1,1,1-Trichloroethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	1,1,2,2-Tetrachloroethane	1 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	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	NS	NS	NS	NS
CO93-PZM	1,1,2-Trichloroethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	1,1-Dichloroethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	1,1-Dichloroethene	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	1,2,3-Trichloropropane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	1,2-Dibromo-3-chloropropane	5 U	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	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	NS	NS	NS
CO93-PZM	1,2-Dibromoethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	1,2-Dichlorobenzene	NS	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	1,2-Dichloroethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	1,2-Dichloropropane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	1,4-Dichlorobenzene	NS	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	2-Butanone	10 U	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	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO93-PZM	2-Hexanone	10 U	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	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO93-PZM	4-Methyl-2-pentanone	10 U	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	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO93-PZM	Acetone	10 U	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	19.9 J	16.7 J	21.8 J	35.1 J	50 U	NS	153	50 U	40.3 J	33.7 J	50 U	50 U	50 U	NS	NS	NS	NS
CO93-PZM	Acrylonitrile	2 U	2 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	20 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	NS	NS	NS
CO93-PZM	Benzene	19,600	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	117,000	122,000	201,000	172,000	162,000	NS	247,000	184,000	148,000	182,000	168,000	183,000 M5	154,000	249,000	181,000	159,000	182,000
CO93-PZM	Bromochloromethane	NS	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Bromodichloromethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Bromoform	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Bromomethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	7.1 CL	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Carbon Disulfide	1 U	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	5 U	9.8	17.4	14.6	9.9	NS	12.7	19.5	6.6	18.9	13.2	11.5 M5	12	NS	NS	NS	NS
CO93-PZM	Carbon Tetrachloride	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Chlorobenzene	1 U	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	7.3	10.5	12.2	10.1	5 U	NS	5 U	5 U	5 U	11.5	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Chloroethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Chloroform	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Chloromethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	cis-1,2-Dichloroethene	NS	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	cis-1,3-Dichloropropene	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Dibromochloromethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Dibromomethane	1 U	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Ethylbenzene	1,110	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	812	934	1,120	975	752	NS	1,250	1,350	1,210	1,270	940	1,190 M5	934	641	1,050	1,290	1,410
CO93-PZM	Iodomethane	50 U	50 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	29.7 J	250 U	5 U	5 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	250 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	NS	NS	NS
CO93-PZM	Methyl tertiary-butyl ether	NS	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	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	NS	NS	NS	NS
CO93-PZM	Methylene Chloride	1 U	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	5 U	5 U	5 U	4 J	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Styrene	283	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	735	952	1,180	1,010	832	NS	1,300	1,620	1,320	1,390	1,020	1,290 M5	1,090	NS	NS	NS	NS
CO93-PZM	Tetrachloroethene	1 U	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	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	NS	NS	NS	NS
CO93-PZM	Toluene	4,710	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	27,100	32,900	63,900	60,700	42,500	NS	69,900	64,500	54,000	58,000	53,800	68,400 M5	52,300	73,900	48,200	57,300	59,800
CO93-PZM	trans-1,2-Dichloroethene	1 U	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	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	NS	NS	NS	NS
CO93-PZM	trans-1,3-Dichloropropene	1 U	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	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	NS	NS	NS	NS
CO93-PZM	trans-1,4-Dichloro-2-butene	5 U	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	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	NS	NS	NS
CO93-PZM	Trichlorofluoromethane	1 U	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	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	NS	NS	NS	NS
CO93-PZM	Vinyl Acetate	10 U	10 U	5 U	5 U	10 U	10 U	50 U	10 U	50 U	10 U	10 U	5 U	10 U	10 U	50 U	50 U	50 U	10 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Vinyl Chloride	1 U	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	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	NS	NS	NS	NS
CO93-PZM	Xylenes	5,380	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	7,240	9,080	17,100	16,200	9,840	NS	16,900	22,500	12,500	14,600	12,300	14,600 M5	8,590	15,000	10,500	16,800	15,100
CO93-PZM	Naphthalene	NS	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	1,540	1,790	1,930	1,930	1,670	NS	1,900	14,100	4,800	4,440	1,850	6,240 M5	1,740	1,340	1,840	6,040	7,200
CO93-PZM	Trichloroethene	1 U	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	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	NS	NS	NS	NS
CO93-PZM	Trichlorofluoromethane	1 U	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	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	NS	NS	NS	NS
CO93-PZM	Vinyl Acetate	10 U	10 U	5 U	5 U	10 U	10 U	50 U	10 U	50 U	10 U	10 U	5 U	10 U	10 U	50 U	50 U	50 U	10 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO93-PZM	Vinyl Chloride	1 U	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	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	NS	NS	NS	NS
CO93-PZM	Xylenes	5,380	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	7,240	9,080	17,100	16,200	9,840	NS	16,900	22,500	12,500	14,600	12,300	14,600 M5	8,590	15,000	10,500	16,800	15,100
CO93-PZM	Naphthalene	NS	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	1,540	1,790	1,930	1,930	1,670	NS	1,900	14,100	4,800	4,440	1,850	6,240 M5	1,740	1,340	1,840	6,040	7,200

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO179-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	105	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,390	NS	8,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	299	NS	225	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	199	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,260	NS	4,400	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,970	NS	2,150	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO179-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,710 B	NS	1,380	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO180-MWI	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	51,700	NS	507	NS	NS	NS	NS	NS	NS	NS	NS	NS	39,700	NS	NS
CO180-MWI	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	182	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	159	NS	NS
CO180-MWI	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,700	NS	120	NS	NS	NS	NS	NS	NS	NS	NS	8,700	NS	NS
CO180-MWI	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWI	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,870	NS	36.6	NS	NS	NS	NS	NS	NS	NS	NS	2,690	NS	NS
CO180-MWI	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,370 L1B	NS	64.8	NS	NS	NS	NS	NS	NS	NS	NS	2,540	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO180-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	33,400	NS	31,900	NS	NS	NS	NS	NS	NS	NS	NS	786	NS	NS
CO180-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	147	NS	120	NS	NS	NS	NS	NS	NS	NS	NS	3.7 J	NS	NS
CO180-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	33.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,330	NS	7,720	NS	NS	NS	NS	NS	NS	NS	NS	180	NS	NS
CO180-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO180-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,540	NS	2,060	NS	NS	NS	NS	NS	NS	NS	NS	54.5	NS	NS
CO180-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,700 L1B	NS	1,670	NS	NS	NS	NS	NS	NS	NS	NS	62.7	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO181-MWI	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	66,600 ML	NS	54,300	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,870	NS	NS
CO181-MWI	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	271	NS	211	NS	NS	NS	NS	NS	NS	NS	NS	71.5	NS	NS
CO181-MWI	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	63.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	17,500	NS	13,600	NS	NS	NS	NS	NS	NS	NS	NS	2,920	NS	NS
CO181-MWI	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWI	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,210	NS	3,280	NS	NS	NS	NS	NS	NS	NS	NS	1,180	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO181-MWI	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,570 L1BM6R1	NS	16,500	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,320	NS	NS
CO181-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	38,400	NS	21,900	NS	NS	NS	NS	NS	NS	NS	NS	NS	28,400	NS	NS
CO181-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	155	NS	92.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	145	NS	NS
CO181-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	22.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,020	NS	4,260	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,810	NS	NS
CO181-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO181-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,420	NS	1,440	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,920	NS	NS
CO181-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,810 L1B	NS	1,810	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,710	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO182-MWI	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	264,000	NS	318,000	NS	NS	NS	NS	NS	NS	NS	NS	218,000	362,000	317,000	336,000
CO182-MWI	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	917	NS	974	NS	NS	NS	NS	NS	NS	NS	NS	322	1,020	911	1,010
CO182-MWI	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	128	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	37,100	NS	59,300	NS	NS	NS	NS	NS	NS	NS	NS	45,700	60,400	44,000	40,000
CO182-MWI	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.7 JB	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO182-MWI	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10,800	NS	17,800	NS	NS	NS	NS	NS	NS	NS	NS	8,870	12,600	12,100	12,900
CO182-MWI	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	947 L1B	NS	295	NS	NS	NS	NS	NS	NS	NS	NS	191	153	320 CH	218

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO186-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	337,000	NS	417,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	47,100	NS	NS
CO186-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,020	NS	708	NS	NS	NS	NS	NS	NS	NS	NS	119	NS	NS
CO186-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	504	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	122,000	NS	134,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,600	NS	NS
CO186-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO186-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	24,400	NS	21,800	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,140	NS	NS
CO186-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	126	NS	138	NS	NS	NS	NS	NS	NS	NS	NS	NS	31.7	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO209-MWI	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	38.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,440	NS	NS	NS	NS	NS	NS	1,120	NS	NS
CO209-MWI	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	33.1	NS	NS	NS	NS	NS	NS	45.2	NS	NS
CO209-MWI	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.4	NS	NS	NS	NS	NS	NS	2.6 J	NS	NS
CO209-MWI	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWI	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	31.1	NS	NS	NS	NS	NS	NS	32.3	NS	NS
CO209-MWI	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10,200	NS	NS	NS	NS	NS	NS	11,100	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO209-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	31.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	28.1	NS	NS	NS	NS	NS	NS	12.7	NS	NS
CO209-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.9 J	NS	NS	NS	NS	NS	NS	2.1 J	NS	NS
CO209-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11.5	NS	NS	NS	NS	NS	NS	5.2	NS	NS
CO209-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO209-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	34	NS	NS	NS	NS	NS	NS	18.8	NS	NS
CO209-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,240	NS	NS	NS	NS	NS	NS	3,940	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO27-PZM012	1,1,1,2-Tetrachloroethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,1,1-Trichloroethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,1,2,2-Tetrachloroethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,1,2-Trichloroethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,1-Dichloroethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,1-Dichloroethene	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,2,3-Trichloropropane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,2-Dibromo-3-chloropropane	1 U	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	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO27-PZM012	1,2-Dibromoethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,2-Dichlorobenzene	10.9 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,2-Dichloroethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,2-Dichloropropane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	1,4-Dichlorobenzene	10.9 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	2-Butanone	5 U	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	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO27-PZM012	2-Hexanone	5 U	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	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO27-PZM012	4-Methyl-2-pentanone	5 U	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	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO27-PZM012	Acetone	5 U	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	16.9 J	58.1	20.3 J	42.9 J	16.7 J	NS	27.4 J	50 U	50 U	36.4 J	NS	NS	NS	28.3 J	50 U	50 U	NS	NS	NS	NS
CO27-PZM012	Acrylonitrile	2 U	10 U	10 U	10 U	10 U	4 U	4 U	4 U	4 U	20 U	20 U	20 U	4 U	4 U	4 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	20 U	20 U	20 U	20 U	NS	NS	NS	20 U	20 U	20 U	NS	NS	NS	NS
CO27-PZM012	Benzene	27,400	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	10,500	3,180	6,490	4,670	3,630	NS	13,500	13,000	11,600	11,900	NS	NS	NS	3,700	9,470	7,750	12,700	9,230	8,490	8,340
CO27-PZM012	Bromochloromethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Bromodichloromethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Bromoform	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Bromomethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Carbon Disulfide	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Carbon Tetrachloride	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Chlorobenzene	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Chloroethane	4.3	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Chloroform	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Chloromethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	cis-1,2-Dichloroethene	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	cis-1,3-Dichloropropene	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Dibromochloromethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Dibromomethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Ethylbenzene	228	110	171	278	73.2	95.8	130	178	169	177	181	175	171	117	130	120	114	20.7	59.8	37.7	35.2	NS	121	141	162	132	NS	NS	NS	39.1	86.5	47.4	28.2	64.5	101	98.9
CO27-PZM012	Iodomethane	1 U	5 U	250 U	5 U	250 U	1 U	6.9 J	50 U	1 U	5 U	250 U	250 U	50 U	1 U	1 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	250 U	250 U	250 U	250 U	NS	NS	NS	250 U	250 U	250 U	NS	NS	NS	NS
CO27-PZM012	Methyl tertiary-butyl ether	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Methylene Chloride	1 U	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	5 U	5 U	5 U	5 U	4.1 J	NS	5 U	5 U	5 U	4 J	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Styrene	342	134	248	348	47.4	110	167	231	199	215	212	216	213	135	134	136	120	16.3	54.7	32.8	32.8	NS	126	138	176	136	NS	NS	NS	29.4	75.6	38.3	NS	NS	NS	NS
CO27-PZM012	Tetrachloroethene	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Toluene	9,290	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	3,390	410	1,130	744	854	NS	4,390	3,980	4,240	3,750	NS	NS	NS	653	3,400	1,070	1,060	2,680	2,750	2,430
CO27-PZM012	trans-1,2-Dichloroethene	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	trans-1,3-Dichloropropene	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	trans-1,4-Dichloro-2-butene	1 U	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	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO27-PZM012	Trichloroethene	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Trichlorofluoromethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Vinyl Acetate	1 U	10 U	50 U	10 U	50 U	2 U	2 U	10 U	2 U	10 U	50 U	50 U	10 U	2 U	2 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Vinyl Chloride	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM012	Xylenes	2,230	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	1,040	160	511	327	308	NS	1,070	1,280	1,390	1,140	NS	NS	NS	299	746	369	234	777	843	795
CO27-PZM012	Naphthalene	1,030	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	913	176	482	293	316	NS	667	905	1,140	1,240	NS	NS	NS	365	609	256	1,120	383	793	661

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO27-PZM046	1,1,1,2-Tetrachloroethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,1,1-Trichloroethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,1,2,2-Tetrachloroethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,1,2-Trichloroethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,1-Dichloroethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,1-Dichloroethene	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,2,3-Trichloropropane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,2-Dibromo-3-chloropropane	1 U	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	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	5,000 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO27-PZM046	1,2-Dibromoethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,2-Dichlorobenzene	11.3 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,2-Dichloroethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,2-Dichloropropane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	1,4-Dichlorobenzene	11.3 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	2-Butanone	6.3	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	50 U	50 U	50 U	50 U	50 U	NS	11.2 J	50 U	10,000 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO27-PZM046	2-Hexanone	5 U	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	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	10,000 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO27-PZM046	4-Methyl-2-pentanone	5 U	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	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	10,000 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO27-PZM046	Acetone	25.2	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	23.3 J	20.5 J	36.5 J	61.2	35.6 J	NS	180	50 U	10,000 U	41.2 J	NS	NS	NS	36.4 J	50 U	74.4	NS	NS	NS	NS
CO27-PZM046	Acrylonitrile	2 U	10 U	10 U	10 U	10 U	20 U	NS	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	20 U	20 U	4,000 U	20 U	NS	NS	NS	20 U	20 U	20 U	NS	NS	NS	NS
CO27-PZM046	Benzene	402,000 C81c	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	215,000	214,000	346,000	297,000	191,000	NS	172,000	42,200	29,800	31,000	NS	NS	NS	28,200	18,800	18,400	22,300	15,600	8,620	18,700
CO27-PZM046	Bromochloromethane	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Bromodichloromethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Bromoform	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Bromomethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Carbon Disulfide	2.1	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	5 U	5 U	1.7 J	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Carbon Tetrachloride	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Chlorobenzene	1 U	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	5 U	2.4 J	5 U	2.5 J	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Chloroethane	7.7	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Chloroform	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Chloromethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	cis-1,2-Dichloroethene	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	cis-1,3-Dichloropropene	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Dibromochloromethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Dibromomethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Ethylbenzene	994	863	1,150	1,170	853	773	NS	1,240	1,120	979	464	633	35.4	474	505	375	611	703	932	789	552	NS	443	272	1000 U	273	NS	NS	NS	207	95	81.4	46.6	202	107	247
CO27-PZM046	Iodomethane	1 U	5 U	250 U	5 U	250 U	5 U	NS	250 U	5 U	5 U	250 U	250 U	250 U	5 U	5 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	250 U	250 U	50,000 U	250 U	NS	NS	NS	250 U	250 U	250 U	NS	NS	NS	NS
CO27-PZM046	Methyl tertiary-butyl ether	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Methylene Chloride	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	4.5 J	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Styrene	350	200	266	403	216	347	NS	357	258	238	157	104	7.8	72.8	88.4	44.7	126	123	204	160	141	NS	85.5	277	1000 U	294	NS	NS	NS	227	43.3	41.7	NS	NS	NS	NS
CO27-PZM046	Tetrachloroethene	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Toluene	69,400	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	33,700	33,200	70,700	59,400	35,100	NS	30,900	9,880	4,850	4,910	NS	NS	NS	5,620	3,270	5,120	1,450	5,560	2,650	6,180
CO27-PZM046	trans-1,2-Dichloroethene	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	trans-1,3-Dichloropropene	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	trans-1,4-Dichloro-2-butene	1 U	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	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	5,000 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO27-PZM046	Trichloroethene	1 U	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Trichlorofluoromethane	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Vinyl Acetate	1 U	10 U	50 U	10 U	50 U	10 U	NS	50 U	10 U	10 U	50 U	50 U	50 U	10 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Vinyl Chloride	1 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	1000 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO27-PZM046	Xylenes	14,300	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	7,290	8,260	23,900	16,300	7,360	NS	7,110	2,020	2,200 J	1,970	NS	NS	NS	1,640	1,240	843	486	1,460	1,060	2,070
CO27-PZM046	Naphthalene	669	731	1,160	7,110	20,800	3,230	NS	12,500	8,750	13,700	3,600	3,320	1,170	5,200	19,700	6,970	7,240	15,800	1,680	1,360	14,100	NS	1,400	1,330	11,200	1,580	NS	NS	NS	1,120	516	327	290	847	3,680	1,450

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO28-PZM010	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,1-Dichloroethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,1-Dichloroethene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,2-Dibromoethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,2-Dichloroethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,2-Dichloropropane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	2-Butanone	NS	NS	NS	NS	NS	125 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	2-Hexanone	NS	NS	NS	NS	NS	125 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	125 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Acetone	NS	NS	NS	NS	NS	625 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Benzene	NS	NS	NS	NS	NS	20,900	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	147,000	37.1	NS	NS	NS	NS	NS	NS	NS	NS	1	NS	NS
CO28-PZM010	Bromochloromethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Bromodichloromethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Bromoform	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Bromomethane	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1.7 B	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Carbon Disulfide	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Carbon Tetrachloride	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Chlorobenzene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Chloroethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Chloroform	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Chloromethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Dibromochloromethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Dibromomethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Ethylbenzene	NS	NS	NS	NS	NS	36.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	319	1 U	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS
CO28-PZM010	Iodomethane	NS	NS	NS	NS	NS	125 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Methylene Chloride	NS	NS	NS	NS	NS	298	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Styrene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	124	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Tetrachloroethene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Toluene	NS	NS	NS	NS	NS	1,080	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,400	2.2	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS
CO28-PZM010	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Trichloroethene	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Trichlorofluoromethane	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Vinyl Acetate	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Vinyl Chloride	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM010	Xylenes	NS	NS	NS	NS	NS	436	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,100	3 U	NS	NS	NS	NS	NS	NS	NS	NS	3 U	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO28-PZM048	1,1,1,2-Tetrachloroethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,1,1-Trichloroethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,1,2,2-Tetrachloroethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,1,2-Trichloroethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,1-Dichloroethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,1-Dichloroethene	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,2,3-Trichloropropane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,2-Dibromo-3-chloropropane	1 U	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,2-Dibromoethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,2-Dichlorobenzene	11 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,2-Dichloroethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,2-Dichloropropane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	1,4-Dichlorobenzene	11 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	2-Butanone	8.9	NS	NS	NS	NS	125 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	2-Hexanone	5 U	NS	NS	NS	NS	125 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	4-Methyl-2-pentanone	5 U	NS	NS	NS	NS	125 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Acetone	42.3	NS	NS	NS	NS	625 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Acrylonitrile	2 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Benzene	207,000	NS	NS	NS	NS	291,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	765 ML	169,000	NS	NS	NS	NS	NS	NS	NS	NS	128,000	NS	NS
CO28-PZM048	Bromochloromethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Bromodichloromethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Bromoform	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Bromomethane	1 U	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Carbon Disulfide	1 U	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Carbon Tetrachloride	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Chlorobenzene	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Chloroethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Chloroform	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Chloromethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	cis-1,2-Dichloroethene	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	cis-1,3-Dichloropropene	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Dibromochloromethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Dibromomethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Ethylbenzene	342	NS	NS	NS	NS	525	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	474	NS	NS	NS	NS	NS	NS	NS	NS	290	NS	NS
CO28-PZM048	Iodomethane	1 U	NS	NS	NS	NS	125 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Methyl tertiary-butyl ether	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Methylene Chloride	1 U	NS	NS	NS	NS	294	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Styrene	118	NS	NS	NS	NS	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	166	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Tetrachloroethene	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Toluene	34,000	NS	NS	NS	NS	34,300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	101 ML	10,700	NS	NS	NS	NS	NS	NS	NS	NS	5,670	NS	NS
CO28-PZM048	trans-1,2-Dichloroethene	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	trans-1,3-Dichloropropene	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	trans-1,4-Dichloro-2-butene	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Trichloroethene	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Trichlorofluoromethane	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Vinyl Acetate	1 U	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Vinyl Chloride	1 U	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO28-PZM048	Xylenes	5,960	NS	NS	NS	NS	6,610	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	45.8	7,160	NS	NS	NS	NS	NS	NS	NS	NS	5,850	NS	NS
CO28-PZM048	Naphthalene	9,620	NS	NS	NS	NS	4,620	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	42.3	12,900	NS	NS	NS	NS	NS	NS	NS	NS	2,750	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO36-PZM008	1,1,1,2-Tetrachloroethane	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,1,1-Trichloroethane	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,1,2,2-Tetrachloroethane	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,1,2-Trichloroethane	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,1-Dichloroethane	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,1-Dichloroethene	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,2,3-Trichloropropane	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,2-Dibromo-3-chloropropane	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	25 U	25 U	25 U	25 U	NS	5 U	25 U	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO36-PZM008	1,2-Dibromoethane	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,2-Dichlorobenzene	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,2-Dichloroethane	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,2-Dichloropropane	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	1,4-Dichlorobenzene	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	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	2-Butanone	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	50 U	50 U	50 U	50 U	NS	10 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO36-PZM008	2-Hexanone	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	50 U	50 U	50 U	50 U	NS	10 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO36-PZM008	4-Methyl-2-pentanone	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	50 U	50 U	50 U	50 U	NS	10 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO36-PZM008	Acetone	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	18.6 J	25.3 JB	50 U	29.5 J	25.2 J	NS	193	50 U	42.9 J	50 U	NS	NS	NS	29 J	50 U	50 U	NS	NS	NS	NS
CO36-PZM008	Acrylonitrile	NS	10 U	10 U	10 U	10 U	4 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	4 U	20 U	20 U	20 U	NS	NS	NS	20 U	20 U	20 U	NS	NS	NS	NS
CO36-PZM008	Benzene	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	3,830	23,400	6,550	8,050	5,380	NS	11,200	9,710	6,780	7,190	NS	NS	NS	10,000	24,000	11,900	9,050	38,700	17,700	20,400
CO36-PZM008	Bromochloromethane	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Bromodichloromethane	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Bromoform	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Bromomethane	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Carbon Disulfide	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Carbon Tetrachloride	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Chlorobenzene	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Chloroethane	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Chloroform	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Chloromethane	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	5 U	5 U	5 U	5 U	5 U	NS	1.9	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	cis-1,2-Dichloroethene	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	cis-1,3-Dichloropropene	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Dibromochloromethane	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Dibromomethane	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Ethylbenzene	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	7.4	88.6	31	27.2	15.3	NS	44.6	47.4	30.4	23.7	NS	NS	NS	46.1	99.6	45.4	18.7	61	61	89.5
CO36-PZM008	Iodomethane	NS	5 U	250 U	5 U	250 U	1 U	5 U	250 U	5 U	5 U	250 U	250 U	250 U	5 U	5 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	50 U	250 U	250 U	250 U	NS	NS	NS	250 U	250 U	250 U	NS	NS	NS	NS
CO36-PZM008	Methyl tertiary-butyl ether	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Methylene Chloride	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	5 U	5 U	5 U	4.4 J	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Styrene	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	1.9 J	25.8	7.2	7.6	5.3	NS	12.5	11.6	9.1	7.5	NS	NS	NS	12.9	27.3	14.3	NS	NS	NS	NS
CO36-PZM008	Tetrachloroethene	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Toluene	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	628	5,590	1,360	1,610	1,160	NS	2,320	2,360	1,700	1,390	NS	NS	NS	2,430	5,800	2,750	1,570	8,940	4,160	4,460
CO36-PZM008	trans-1,2-Dichloroethene	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	trans-1,3-Dichloropropene	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	trans-1,4-Dichloro-2-butene	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	25 U	25 U	25 U	25 U	25 U	NS	5 U	25 U	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO36-PZM008	Trichloroethene	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Trichlorofluoromethane	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Vinyl Acetate	NS	10 U	50 U	10 U	50 U	2 U	10 U	50 U	10 U	10 U	50 U	50 U	50 U	10 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	10 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Vinyl Chloride	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	5 U	5 U	5 U	5 U	5 U	NS	1 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM008	Xylenes	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	392	1,610	520	642	536	NS	763	802	816	595	NS	NS	NS	834	1,670	1,090	659	1,250	988	1,510
CO36-PZM008	Naphthalene	NS	679	935	772	584	223	411	1,020	363	382	441	355	723	440	435	283	113	752	239	311	248	NS	343	462	424	447	NS	NS	NS	456	817	583	378	540	769 L1	943

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO36-PZM043	1,1,1,2-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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	1,1,1-Trichloroethane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	1,1,2-Trichloroethane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	1,1-Dichloroethane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	1,1-Dichloroethene	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	1,2,3-Trichloropropane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	1,2-Dibromo-3-chloropropane	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	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO36-PZM043	1,2-Dibromoethane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	1,2-Dichlorobenzene	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	1,2-Dichloroethane	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	1,2-Dichloropropane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	1,4-Dichlorobenzene	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	2-Butanone	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	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO36-PZM043	2-Hexanone	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	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO36-PZM043	4-Methyl-2-pentanone	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	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO36-PZM043	Acetone	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	50 U	60 B	22.7 J	25.1 J	14.9 J	NS	196	50 U	50.5	29.2 J	NS	NS	NS	30.7 J	50 U	50 U	NS	NS	NS	NS
CO36-PZM043	Acrylonitrile	NS	10 U	10 U	10 U	10 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	20 U	20 U	20 U	20 U	NS	NS	NS	20 U	20 U	20 U	NS	NS	NS	NS
CO36-PZM043	Benzene	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	27,900	17,200	29,800	31,200	22,200	NS	22,400	20,200	16,400	21,600	NS	NS	NS	16,400	7,910	22,000	2,750	14,100	22,800	26,700
CO36-PZM043	Bromochloromethane	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Bromodichloromethane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Bromoform	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Bromomethane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Carbon Disulfide	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Carbon Tetrachloride	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Chlorobenzene	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Chloroethane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Chloroform	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Chloromethane	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	5 U	NS	3.4 J	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	cis-1,2-Dichloroethene	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	cis-1,3-Dichloropropene	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Dibromochloromethane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Dibromomethane	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Ethylbenzene	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	45.5	22.8	45.6	45.8	76.1	NS	66	71.5	80.7	68.7	NS	NS	NS	45.5	13.1	45.8	5 U	5.3	42.9	56.2
CO36-PZM043	Iodomethane	NS	5 U	250 U	5 U	250 U	5 U	5 U	250 U	5 U	5 U	250 U	250 U	250 U	5 U	5 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	250 U	250 U	250 U	250 U	NS	NS	NS	250 U	250 U	250 U	NS	NS	NS	NS
CO36-PZM043	Methyl tertiary-butyl ether	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Methylene Chloride	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	5 U	5 U	5 U	4.2 J	NS	5 U	5 U	5 U	3.3 J	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Styrene	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	9.9	5.2	10.6	10.1	19.6	NS	15.3	16	19.7	15.9	NS	NS	NS	10.1	2.9 J	9.8	NS	NS	NS	NS
CO36-PZM043	Tetrachloroethene	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	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Toluene	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	3,400	1,810	3,490	3,740	4,210	NS	3,550	3,620	3,160	4,080	NS	NS	NS	2,330	1,130	3,110	263	841	3,160	3,710
CO36-PZM043	trans-1,2-Dichloroethene	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	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	trans-1,3-Dichloropropene	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	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	trans-1,4-Dichloro-2-butene	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	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO36-PZM043	Trichloroethene	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	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Trichlorofluoromethane	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	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Vinyl Acetate	NS	10 U	50 U	10 U	50 U	10 U	10 U	50 U	10 U	10 U	50 U	50 U	50 U	10 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Vinyl Chloride	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	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO36-PZM043	Xylenes	NS	381	1,090	1,470	1,770	1,120	1,240	860	1,900	1,040	847	626	836	553	704	675	740	380	739	735	1,150	NS	985	1,100	1,190	1,020	NS	NS	NS	675	375	730	134	287	711	855
CO36-PZM043	Naphthalene	NS	574	940	904	996	690	655	642	995	562	583	766	7,980	538	742	812	655	414	836	766	745	NS	517	792	750	764	NS	NS	NS	566	191	527	131	187	835 L1	667

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO37-PZM003	1,1,1,2-Tetrachloroethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,1,1-Trichloroethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,1,2,2-Tetrachloroethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,1,2-Trichloroethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,1-Dichloroethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,1-Dichloroethene	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,2,3-Trichloropropane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,2-Dibromo-3-chloropropane	NS	5 U	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,2-Dibromoethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,2-Dichlorobenzene	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,2-Dichloroethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,2-Dichloropropane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	1,4-Dichlorobenzene	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	2-Butanone	NS	25 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	2-Hexanone	NS	25 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	4-Methyl-2-pentanone	NS	25 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Acetone	NS	183	183	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Acrylonitrile	NS	10 U	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Benzene	NS	22,500	22,100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,120	NS	NS
CO37-PZM003	Bromochloromethane	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Bromodichloromethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Bromoform	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Bromomethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Carbon Disulfide	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Carbon Tetrachloride	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Chlorobenzene	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Chloroethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Chloroform	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Chloromethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	cis-1,2-Dichloroethene	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	cis-1,3-Dichloropropene	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Dibromochloromethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Dibromomethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Ethylbenzene	NS	413	375	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	133	NS	NS
CO37-PZM003	Iodomethane	NS	5 U	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Methyl tertiary-butyl ether	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Methylene Chloride	NS	5.9	5.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Styrene	NS	381	415	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Tetrachloroethene	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Toluene	NS	14,200	15,900	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,000	NS	NS
CO37-PZM003	trans-1,2-Dichloroethene	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	trans-1,3-Dichloropropene	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	trans-1,4-Dichloro-2-butene	NS	5 U	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Trichloroethene	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Trichlorofluoromethane	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Vinyl Acetate	NS	10 U	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Vinyl Chloride	NS	5 U	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO37-PZM003	Xylenes	NS	4,080	3,750	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,310	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO37-PZM038	1,1,1,2-Tetrachloroethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,1,1-Trichloroethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,1,2,2-Tetrachloroethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,1,2-Trichloroethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,1-Dichloroethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,1-Dichloroethene	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,2,3-Trichloropropane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,2-Dibromo-3-chloropropane	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	5 U	5 U	25 U	25 U	25 U	NS	25 U	NS	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO37-PZM038	1,2-Dibromoethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,2-Dichlorobenzene	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,2-Dichloroethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,2-Dichloropropane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	1,4-Dichlorobenzene	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	2-Butanone	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	10 U	10 U	50 U	50 U	50 U	NS	50 U	NS	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO37-PZM038	2-Hexanone	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	10 U	10 U	50 U	50 U	50 U	NS	50 U	NS	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO37-PZM038	4-Methyl-2-pentanone	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	10 U	10 U	50 U	50 U	50 U	NS	50 U	NS	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO37-PZM038	Acetone	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	5.8 J	7.7 JB	50 U	43.9 J	17.3 J	NS	258	NS	39.7 J	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO37-PZM038	Acrylonitrile	NS	10 U	10 U	NS	10 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	4 U	4 U	4 U	4 U	20 U	20 U	20 U	NS	20 U	NS	20 U	20 U	NS	NS	NS	20 U	20 U	20 U	NS	NS	NS	NS
CO37-PZM038	Benzene	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	9,350	10,800	12,100	12,300	13,900	NS	17,600	NS	10,800	13,400	NS	NS	NS	14,200	16,300	16,900	16,400	16,000	16,000	17,800
CO37-PZM038	Bromochloromethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Bromodichloromethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Bromoform	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Bromomethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Carbon Disulfide	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	1 U	1 U	1.6 J	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Carbon Tetrachloride	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Chlorobenzene	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	0.47 J	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Chloroethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Chloroform	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Chloromethane	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 U	1 U	5 U	5 U	5 U	NS	5.1	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	cis-1,2-Dichloroethene	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	1 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	cis-1,3-Dichloropropene	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Dibromochloromethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Dibromomethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Ethylbenzene	NS	176	303 H1	NS	346	423	442	399	372	322	286	236	244	5 U	238	270	263	263	248	243	244	NS	313	NS	306	289	NS	NS	NS	268	273	262	217	268	281	279
CO37-PZM038	Iodomethane	NS	5 U	250 U	NS	250 U	5 U	5 U	250 U	5 U	5 U	250 U	250 U	250 U	5 U	1 U	50 U	50 U	50 U	250 U	250 U	250 U	NS	250 U	NS	250 U	250 U	NS	NS	NS	250 U	250 U	250 U	NS	NS	NS	NS
CO37-PZM038	Methyl tertiary-butyl ether	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	1 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Methylene Chloride	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	1 U	1 U	5 U	5 U	4.5 J	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Styrene	NS	341	533 H1	NS	585	616	813	696	601	540	442	381	12.2	5 U	315	338	368	385	374	377	366	NS	470	NS	481	448	NS	NS	NS	425	436	431	NS	NS	NS	NS
CO37-PZM038	Tetrachloroethene	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	7	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Toluene	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	6,570	6,980	7,280	7,550	8,190	NS	9,520	NS	6,950	8,030	NS	NS	NS	8,780	8,330	8,370	8,710	8,240	8,350	10,300
CO37-PZM038	trans-1,2-Dichloroethene	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	trans-1,3-Dichloropropene	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	trans-1,4-Dichloro-2-butene	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	5 U	5 U	25 U	25 U	25 U	NS	25 U	NS	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO37-PZM038	Trichloroethene	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	1 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Trichlorofluoromethane	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Vinyl Acetate	NS	10 U	50 U	NS	50 U	10 U	10 U	50 U	10 U	10 U	50 U	50 U	50 U	10 U	2 U	10 U	10 U	10 U	50 U	50 U	50 U	NS	50 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Vinyl Chloride	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 U	1 U	5 U	5 U	5 U	NS	5 U	NS	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO37-PZM038	Xylenes	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	1,880	1,920	2,020	2,040	1,930	NS	2,510	NS	2,450	2,300	NS	NS	NS	2,220	2,260	2,160	1,910	2,320	2,420	2,370
CO37-PZM038	Naphthalene	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	1,260	1,620	1,330	1,370	1,370	NS	1,390	NS	1,800	1,930	NS	NS	NS	1,770	1,430	1,200	1,210	1,850	15,600 L1	1,590

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO38-PZM006	1,1,1,2-Tetrachloroethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,1,1-Trichloroethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,1,2,2-Tetrachloroethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,1,2-Trichloroethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,1-Dichloroethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,1-Dichloroethene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,2,3-Trichloropropane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,2-Dibromo-3-chloropropane	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	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	NS	NS	NS	5 U	25 U	25 U	NS	NS	NS	NS
CO38-PZM006	1,2-Dibromoethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,2-Dichlorobenzene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,2-Dichloroethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,2-Dichloropropane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	1,4-Dichlorobenzene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	2-Butanone	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	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	10 U	50 U	50 U	NS	NS	NS	NS
CO38-PZM006	2-Hexanone	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	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	1.4 J	50 U	50 U	NS	NS	NS	NS
CO38-PZM006	4-Methyl-2-pentanone	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	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	10 U	50 U	50 U	NS	NS	NS	NS
CO38-PZM006	Acetone	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	50 U	22.4 JB	50 U	16.5 J	50 U	NS	117	50 U	50 U	42.3 J	NS	NS	NS	15	50 U	56.9	NS	NS	NS	NS
CO38-PZM006	Acrylonitrile	NS	10 U	10 U	10 U	10 U	20 U	4 U	4 U	4 U	20 U	20 U	4 U	4 U	4 U	4 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	20 U	20 U	20 U	20 U	NS	NS	NS	4 U	20 U	20 U	NS	NS	NS	NS
CO38-PZM006	Benzene	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	5,250	5,520	4,690	5,060	4,660	NS	5,940	1,900	4,210	4,490	NS	NS	NS	4,670	4,370	5,420	9,970	4,110	4,500	5,070
CO38-PZM006	Bromochloromethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Bromodichloromethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Bromoform	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Bromomethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Carbon Disulfide	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	5 U	5 U	1.7 J	5 U	5 U	NS	5 U	5 U	5 U	2.5 JL1	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Carbon Tetrachloride	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Chlorobenzene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Chloroethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Chloroform	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Chloromethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	cis-1,2-Dichloroethene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	cis-1,3-Dichloropropene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Dibromochloromethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Dibromomethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Ethylbenzene	NS	96.6	97.1	118	123	127	150	148	134	104	67.4	107	269	76	94.9	72.2	66.8	60.1	50.8	60.7	59	NS	65.2	34.4	74.3	64	NS	NS	NS	64	57.5	54.3	52	46.1	59.3	58.7
CO38-PZM006	Iodomethane	NS	5 U	250 U	5 U	250 U	5 U	6.6 J	2.3 J	1 U	5 U	250 U	50 U	50 U	1 U	1 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	250 U	250 U	250 U	250 U	NS	NS	NS	50 U	250 U	250 U	NS	NS	NS	NS
CO38-PZM006	Methyl tertiary-butyl ether	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Methylene Chloride	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	5 U	5 U	5 U	5 U	5.3	NS	5 U	5 U	5 U	4.1 J	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Styrene	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	41	43.7	35.9	45.5	48.1	NS	35.1	5	51.2	46.9	NS	NS	NS	43.2	39.9	35.9	NS	NS	NS	NS
CO38-PZM006	Tetrachloroethene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Toluene	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	1,260	1,060	920	1,040	1,100	NS	859	133	1,260	1,020	NS	NS	NS	1,070	984	1,300	1,080	800	871	1,130
CO38-PZM006	trans-1,2-Dichloroethene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	trans-1,3-Dichloropropene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	trans-1,4-Dichloro-2-butene	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	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	NS	NS	NS	5 U	25 U	25 U	NS	NS	NS	NS
CO38-PZM006	Trichloroethene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Trichlorofluoromethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Vinyl Acetate	NS	10 U	50 U	10 U	50 U	10 U	2 U	10 U	2 U	10 U	50 U	10 U	10 U	2 U	2 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Vinyl Chloride	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM006	Xylenes	NS	704	668	606	961	838	922	821	941	722	354	776	2,120	557	698	549	559	478	443	496	490	NS	479	108	561	507	NS	NS	NS	503	450	452	420	373	446	462
CO38-PZM006	Naphthalene	NS	626	748	611	819	800	1,660	2,900	2,890	780	615	1,150	6,620	1,730	2,070	1,190	1,350	1,320	1,170	1,370	1,520	NS	1,280	651	1,740	2,110	NS	NS	NS	1,990	1,460	1,360	1,140	981	1,620	1,660

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO38-PZM043	1,1,1,2-Tetrachloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,1,1-Trichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,1,2,2-Tetrachloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,1,2-Trichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,1-Dichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,1-Dichloroethene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,2,3-Trichloropropane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,2-Dibromo-3-chloropropane	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM043	1,2-Dibromoethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,2-Dichlorobenzene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,2-Dichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,2-Dichloropropane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	1,4-Dichlorobenzene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	2-Butanone	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	10 U	10 U	10 U	10 U	NS	2.4 J	10 U	10 U	3.6 J	NS	NS	NS	5.9 J	10 U	10 U	NS	NS	NS	NS
CO38-PZM043	2-Hexanone	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	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	2.8 JMH	NS	NS	NS	3.3 J	10 U	10 U	NS	NS	NS	NS
CO38-PZM043	4-Methyl-2-pentanone	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	10 U	10 U	10 U	10 U	NS	0.47 J	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO38-PZM043	Acetone	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	3.4 J	3.2 JB	3.3 J	3.1 J	10 U	NS	217	10 U	10 U	9.1 J	NS	NS	NS	27.6	10 U	10 U	NS	NS	NS	NS
CO38-PZM043	Acrylonitrile	NS	10 U	10 U	10 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	4 U	4 U	4 U	4 U	NS	NS	NS	4 U	4 U	4 U	NS	NS	NS	NS
CO38-PZM043	Benzene	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	1 U	3.8	4	0.45 J	0.4 J	NS	3.4	19.2	0.54 J	1.5 C8P2	NS	NS	NS	1.1	1 U	1 U	1 U	1.8	0.76 J	1 U
CO38-PZM043	Bromochloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Bromodichloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Bromoform	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Bromomethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	0.88 JBML	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Carbon Disulfide	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	1 U	1 U	0.32 J	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Carbon Tetrachloride	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Chlorobenzene	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	1 U	1 U	0.27 J	1 U	1 U	NS	0.45 J	0.33 J	1 U	0.4 J	NS	NS	NS	1 U	0.39 J	0.32 J	NS	NS	NS	NS
CO38-PZM043	Chloroethane	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Chloroform	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Chloromethane	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 U	1 U	1 U	1 U	1 U	NS	3.8	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	cis-1,2-Dichloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	cis-1,3-Dichloropropene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Dibromochloromethane	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Dibromomethane	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Ethylbenzene	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CO38-PZM043	Iodomethane	NS	5 U	250 U	5 U	50 U	1 U	6.2 J	50 U	1 U	1 U	50 U	50 U	50 U	1 U	1 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO38-PZM043	Methyl tertiary-butyl ether	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Methylene Chloride	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Styrene	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Tetrachloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Toluene	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	1 U	0.39 J	1	1 U	1 U	NS	0.46 J	1.1	0.33 J	0.53 J	NS	NS	NS	1 U	1 U	1 U	1 U	0.35 J	1 U	1 U
CO38-PZM043	trans-1,2-Dichloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	trans-1,3-Dichloropropene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	trans-1,4-Dichloro-2-butene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO38-PZM043	Trichloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	0.34 JB	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Trichlorofluoromethane	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Vinyl Acetate	NS	10 U	50 U	10 U	10 U	2 U	2 U	10 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Vinyl Chloride	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO38-PZM043	Xylenes	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	3 U	3 U	1.6 J	3 U	3 U	NS	3 U	2.4 J	1.4 J	3 U	NS	NS	NS	3 U	3 U	3 U	3 U	3 U	3 U	3 U
CO38-PZM043	Naphthalene	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	2 U	2 U	5.8	2 U	2 U	NS	2 U	2.9	30.5 C8ML	2 U	NS	NS	NS	2 U	2 U	2 U	2 U	9.4	2 U	2 U

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO39-PZM007	1,1,1,2-Tetrachloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,1,1-Trichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,1,2,2-Tetrachloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,1,2-Trichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,1-Dichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,1-Dichloroethene	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,2,3-Trichloropropane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,2-Dibromo-3-chloropropane	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	25 U	25 U	NS	NS	NS	5 U	25 U	25 U	NS	NS	NS	NS
CO39-PZM007	1,2-Dibromoethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,2-Dichlorobenzene	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,2-Dichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,2-Dichloropropane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	1,4-Dichlorobenzene	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	2-Butanone	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	10 U	10 U	10 U	10 U	NS	10 U	10 U	50 U	50 U	NS	NS	NS	10 U	50 U	50 U	NS	NS	NS	NS
CO39-PZM007	2-Hexanone	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	10 U	10 U	10 U	10 U	NS	10 U	10 U	50 U	50 U	NS	NS	NS	1.6 J	50 U	50 U	NS	NS	NS	NS
CO39-PZM007	4-Methyl-2-pentanone	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	10 U	10 U	10 U	10 U	NS	10 U	10 U	50 U	50 U	NS	NS	NS	10 U	50 U	50 U	NS	NS	NS	NS
CO39-PZM007	Acetone	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	4.2 J	3.8 JB	3 J	10 U	10 U	NS	10.7	7.2 J	31.6 J	50 U	NS	NS	NS	19.7	50 U	39.5 J	NS	NS	NS	NS
CO39-PZM007	Acrylonitrile	NS	10 U	10 U	10 U	2 U	4 U	4 U	4 U	4 U	4 U	20 U	20 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	4 U	4 U	20 U	20 U	NS	NS	NS	4 U	20 U	20 U	NS	NS	NS	NS
CO39-PZM007	Benzene	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	370	355	664	381	282	NS	767	8,990	1,350	657	NS	NS	NS	455	3,850 MH	515	249	3,120	7,320	9,720 E
CO39-PZM007	Bromochloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Bromodichloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Bromoform	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Bromomethane	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	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Carbon Disulfide	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Carbon Tetrachloride	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Chlorobenzene	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	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Chloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Chloroform	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	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Chloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	cis-1,2-Dichloroethene	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	cis-1,3-Dichloropropene	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Dibromochloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Dibromomethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Ethylbenzene	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	2.1	2.2	4.1	2.2	0.99 J	NS	4.7	52.9	12.6	4.3 J	NS	NS	NS	2	32.2	5 U	5 U	6.9	21.8	39.5
CO39-PZM007	Iodomethane	NS	5 U	250 U	5 U	50 U	1 U	7.1 J	50 U	1 U	1 U	250 U	250 U	50 U	1 U	1 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	250 U	250 U	NS	NS	NS	50 U	250 U	250 U	NS	NS	NS	NS
CO39-PZM007	Methyl tertiary-butyl ether	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Methylene Chloride	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	1 U	1 U	1 U	1 U	1	NS	1 U	1 U	5 U	3.8 J	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Styrene	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	1 U	1 U	3	1 U	0.55 J	NS	4.9	65.4	10.5	3.5 J	NS	NS	NS	1.5	44.4	5 U	NS	NS	NS	NS
CO39-PZM007	Tetrachloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Toluene	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	33.5	21.1	79	24.8	9.9	NS	126	1,980	295	98.6	NS	NS	NS	45	1,230 ML	27.2	12.2	487	1,080	1,640
CO39-PZM007	trans-1,2-Dichloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	trans-1,3-Dichloropropene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	trans-1,4-Dichloro-2-butene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	25 U	25 U	NS	NS	NS	5 U	25 U	25 U	NS	NS	NS	NS
CO39-PZM007	Trichloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Trichlorofluoromethane	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Vinyl Acetate	NS	10 U	50 U	10 U	10 U	2 U	2 U	10 U	2 U	2 U	50 U	50 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Vinyl Chloride	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	1 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM007	Xylenes	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	11.8	12.4	23.6	12	4.7	NS	48	472	90.8	32.7	NS	NS	NS	11.9	265	6.8 J	15 U	58	195	374
CO39-PZM007	Naphthalene	NS	324	1,760	1,440	378	489	3,770	20,700	538	1,570	1,890	1,450	676	841	918	643	356	880	1,180	902	433	NS	1,540	2,770	970	1,120	NS	NS	NS	251	1,550 ML	548	171	353	1,020 L1	1,340

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO39-PZM042	1,1,1,2-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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	1,1,1-Trichloroethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	1,1,2-Trichloroethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	1,1-Dichloroethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	1,1-Dichloroethene	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	1,2,3-Trichloropropane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	1,2-Dibromo-3-chloropropane	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	25 U	25 U	5 U	5 U	5 U	NS	5 U	5 U	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO39-PZM042	1,2-Dibromoethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	1,2-Dichlorobenzene	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	5 U	5 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	1,2-Dichloroethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	1,2-Dichloropropane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	1,4-Dichlorobenzene	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	5 U	5 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	2-Butanone	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	50 U	50 U	10 U	10 U	10 U	NS	10 U	10 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO39-PZM042	2-Hexanone	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	50 U	50 U	10 U	10 U	10 U	NS	10 U	10 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO39-PZM042	4-Methyl-2-pentanone	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	50 U	50 U	10 U	10 U	10 U	NS	10 U	10 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO39-PZM042	Acetone	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	50 U	25.9 JB	3.2 J	3.4 J	10 U	NS	64.4	10 U	46.4 J	50 U	NS	NS	NS	30.1 J	50 U	51.7	NS	NS	NS	NS
CO39-PZM042	Acrylonitrile	NS	10 U	10 U	10 U	10 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	4 U	4 U	4 U	NS	4 U	4 U	20 U	20 U	NS	NS	NS	20 U	20 U	20 U	NS	NS	NS	NS
CO39-PZM042	Benzene	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	1,890	1,090	6,040	3,720	1,290	NS	7,900	20,500	5,710	6,280	NS	NS	NS	3,080	735	2,570 H5ML	10,300	12,000	8,640	9,520
CO39-PZM042	Bromochloromethane	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	5 U	5 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Bromodichloromethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Bromoform	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Bromomethane	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	5 U	5 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Carbon Disulfide	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	5 U	5 U	2.1	1 U	1 U	NS	0.39 J	0.98 J	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Carbon Tetrachloride	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Chlorobenzene	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	5 U	5 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Chloroethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Chloroform	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	5 U	5 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Chloromethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	cis-1,2-Dichloroethene	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	5 U	5 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	cis-1,3-Dichloropropene	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Dibromochloromethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Dibromomethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Ethylbenzene	NS	349	355	409	340	466	133	428	369	276	298	227	63.3	111	223	140	14.7	7.6	70.7	37.7	12.3	NS	55.9	165	64.7	63.7	NS	NS	NS	22.3	4.3 J	21.9	102	68	59	70.4
CO39-PZM042	Iodomethane	NS	5 U	250 U	5 U	250 U	5 U	30.4 J	250 U	5 U	5 U	250 U	250 U	250 U	5 U	5 U	250 U	250 U	250 U	50 U	50 U	50 U	NS	50 U	50 U	250 U	250 U	NS	NS	NS	250 U	250 U	250 U	NS	NS	NS	NS
CO39-PZM042	Methyl tertiary-butyl ether	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	5 U	5 U	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Methylene Chloride	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	5 U	5 U	1 U	1 U	0.86 J	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Styrene	NS	549	606	536	552	701	207	710	544	464	442	338	97.9	170	338	203	19	10	98.9	55.3	16.4	NS	81.4	215	97.7	93.6	NS	NS	NS	29	5 U	26.8	NS	NS	NS	NS
CO39-PZM042	Tetrachloroethene	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Toluene	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	568	272	2,240	1,320	377	NS	2,120	6,380	2,260	1,980	NS	NS	NS	882	105	960 ML	3,450	3,150	1,920	2,150
CO39-PZM042	trans-1,2-Dichloroethene	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	trans-1,3-Dichloropropene	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	trans-1,4-Dichloro-2-butene	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	25 U	25 U	5 U	5 U	5 U	NS	5 U	5 U	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO39-PZM042	Trichloroethene	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Trichlorofluoromethane	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Vinyl Acetate	NS	10 U	50 U	10 U	50 U	10 U	10 U	50 U	10 U	10 U	50 U	50 U	50 U	10 U	10 U	50 U	50 U	50 U	10 U	10 U	10 U	NS	10 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Vinyl Chloride	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	1 U	1 U	1 U	NS	1 U	1 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO39-PZM042	Xylenes	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	129	69.8	580	323	117	NS	542	1,430	546	524	NS	NS	NS	187	27.4	182	869	624	503	595
CO39-PZM042	Naphthalene	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	947	1,040	1,840	1,970	1,280	NS	9,820	7,040	1,990	1,610	NS	NS	NS	1,090	722	1,420 ML	705	1,270	1,590 L1	1,420

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO40-PZM008	1,1,1,2-Tetrachloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	1,1,1-Trichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	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	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	1,1,2-Trichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	1,1-Dichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	1,1-Dichloroethene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	1,2,3-Trichloropropane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	1,2-Dibromo-3-chloropropane	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO40-PZM008	1,2-Dibromoethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	1,2-Dichlorobenzene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	1,2-Dichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	1,2-Dichloropropane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	1,4-Dichlorobenzene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	2-Butanone	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	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	1.7 J	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO40-PZM008	2-Hexanone	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	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	0.7 J	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO40-PZM008	4-Methyl-2-pentanone	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	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO40-PZM008	Acetone	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	10 U	7.4 J	3.1 J	4.3 J	10 U	NS	52.2 MLR1	10 U	10 U	5.9 J	NS	NS	NS	11	10 U	10 U	NS	NS	NS	NS
CO40-PZM008	Acrylonitrile	NS	10 U	10 U	10 U	10 U	20 U	20 U	20 U	20 U	20 U	20 U	4 U	20 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	4 U	4 U	4 U	4 U	NS	NS	NS	4 U	4 U	4 U	NS	NS	NS	NS
CO40-PZM008	Benzene	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	61.1	464	5,690	1,340	40.5	NS	241 ML	3,900	137	3,250	NS	NS	NS	629	799	1,450	1,450	5,050	664	2,880 E
CO40-PZM008	Bromochloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Bromodichloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Bromoform	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Bromomethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Carbon Disulfide	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 U	1 U	0.71 J	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Carbon Tetrachloride	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Chlorobenzene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Chloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Chloroform	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	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Chloromethane	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	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	cis-1,2-Dichloroethene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	cis-1,3-Dichloropropene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Dibromochloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Dibromomethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Ethylbenzene	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	1 U	1.6	105	17.3	1 U	NS	1.6	70.6	1.3	48.6	NS	NS	NS	5.8	5.7	4	8.7	61.3	3.5	20.8
CO40-PZM008	Iodomethane	NS	5 U	250 U	5 U	250 U	5 U	5 U	250 U	5 U	5 U	250 U	50 U	250 U	1 U	1 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO40-PZM008	Methyl tertiary-butyl ether	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Methylene Chloride	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Styrene	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	1 U	1	70.2	19.7	1 U	NS	1 U	60.9	1 U	46.2	NS	NS	NS	5.1	4.1	3.2	NS	NS	NS	NS
CO40-PZM008	Tetrachloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Toluene	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	3.7	29.8	1,670	344	4.7	NS	19.8	1,230	19.6	898	NS	NS	NS	134	145	78	197	712	75.7	291
CO40-PZM008	trans-1,2-Dichloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	trans-1,3-Dichloropropene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	trans-1,4-Dichloro-2-butene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO40-PZM008	Trichloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	0.43 JB	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Trichlorofluoromethane	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Vinyl Acetate	NS	10 U	50 U	10 U	50 U	10 U	10 U	50 U	10 U	10 U	50 U	10 U	50 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Vinyl Chloride	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO40-PZM008	Xylenes	NS	1,470	1,570	1,030	901	849	851	NS	984	69.5	150	23	48.4	3.5	47.4	9.4	3.4	16.8	614	153	2.8 J	NS	16.4	540	8.4	353	NS	NS	NS	44.7	35.9	64.4	68.1	367	25.1	153
CO40-PZM008	Naphthalene	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	27	160	2,190	1,720	16	NS	61.3	3,340	68.2	2,310	NS	NS	NS	335	179	303	1,220	2,260	336	1,570

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO41-PZM001	1,1,1,2-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	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	1,1,1-Trichloroethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	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	1 U	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	1,1,2-Trichloroethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	1,1-Dichloroethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	1,1-Dichloroethene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	1,2,3-Trichloropropane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	1,2-Dibromo-3-chloropropane	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	25 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM001	1,2-Dibromoethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	1,2-Dichlorobenzene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	1,2-Dichloroethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	1,2-Dichloropropane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	1,4-Dichlorobenzene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	2-Butanone	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	50 U	10 U	10 U	10 U	10 U	NS	6.7 J	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO41-PZM001	2-Hexanone	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	50 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	0.63 J	10 U	10 U	NS	NS	NS	NS
CO41-PZM001	4-Methyl-2-pentanone	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	50 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO41-PZM001	Acetone	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	50 U	5 JB	10 U	5.9 J	10 U	NS	24.1 B	8.2 J	10 U	10 U	NS	NS	NS	10	10 U	10 U	NS	NS	NS	NS
CO41-PZM001	Acrylonitrile	NS	10 U	10 U	10 U	10 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	4 U	20 U	4 U	4 U	4 U	4 U	NS	4 U	4 U	4 U	4 U	NS	NS	NS	4 U	4 U	4 U	NS	NS	NS	NS
CO41-PZM001	Benzene	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	200	5.2	338	252	1.7	NS	2,520	4,470	6,500	1,190	NS	NS	NS	546	43.8	5.8	7.3	1,740	124	17,400 M5
CO41-PZM001	Bromochloromethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Bromodichloromethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Bromoform	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Bromomethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Carbon Disulfide	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Carbon Tetrachloride	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Chlorobenzene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Chloroethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Chloroform	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Chloromethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	cis-1,2-Dichloroethene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	cis-1,3-Dichloropropene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Dibromochloromethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Dibromomethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Ethylbenzene	NS	1,570	1,270	1,380	1,010	990	1,020	129	312	66.9	112	130	314	23.2	59.5	392	4.8 J	1 U	20.5	22.2	1 U	NS	137	144	257	41.8	NS	NS	NS	45.8	3.1	1 U	0.52 J	85.8	3.6	564 M5
CO41-PZM001	Iodomethane	NS	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	250 U	250 U	5 U	5 U	50 U	250 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO41-PZM001	Methyl tertiary-butyl ether	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Methylene Chloride	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Styrene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	4.7	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Tetrachloroethene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Toluene	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	66	0.62 J	327	285	0.6 J	NS	1,520	2,110	3,930	625	NS	NS	NS	553	17	6.7	2.2	1,200	44.5	11,200 M5
CO41-PZM001	trans-1,2-Dichloroethene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	trans-1,3-Dichloropropene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	trans-1,4-Dichloro-2-butene	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	25 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM001	Trichloroethene	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Trichlorofluoromethane	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Vinyl Acetate	NS	10 U	50 U	10 U	50 U	10 U	10 U	5 U	10 U	10 U	50 U	50 U	50 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U	NS	10 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Vinyl Chloride	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	5 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO41-PZM001	Xylenes	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	44.5	3 U	203	177	3 U	NS	850	1,200	1,890	288	NS	NS	NS	413	14.6	2.6 J	1.4 J	760	25.2	5,190 M5
CO41-PZM001	Naphthalene	NS	996	1,250	919	677	707	645	120	194	66.6	98.7	186	280	18.9	45.7	271	16	7.3	12	9.4	2 U	NS	75.7	103	133	109	NS	NS	NS	30.5	2 U	2 U	14.3	29.3	3.4	332 M5

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO41-PZM036	1,1,1,2-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	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	1,1,1-Trichloroethane	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	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	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	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	1,1,2-Trichloroethane	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	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	1,1-Dichloroethane	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	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	1,1-Dichloroethene	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	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	1,2,3-Trichloropropane	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	5 U	NS	5 U	5 U	5 U	0.95 J	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	1,2-Dibromo-3-chloropropane	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	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO41-PZM036	1,2-Dibromoethane	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	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	1,2-Dichlorobenzene	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	1,2-Dichloroethane	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	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	1,2-Dichloropropane	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	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	1,4-Dichlorobenzene	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	2-Butanone	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	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	10 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO41-PZM036	2-Hexanone	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	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	10 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO41-PZM036	4-Methyl-2-pentanone	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	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	10 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO41-PZM036	Acetone	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	50 U	50 U	50 U	51.1	50 U	NS	76.9 B	50 U	50 U	6.5 J	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO41-PZM036	Acrylonitrile	NS	10 U	10 U	10 U	10 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	20 U	20 U	20 U	4 U	NS	NS	NS	20 U	20 U	20 U	NS	NS	NS	NS
CO41-PZM036	Benzene	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	121,000	108,000	189,000	245,000	224,000	NS	213,000	225,000	169,000	196,000	NS	NS	NS	206,000	231,000	251,000	288,000	283,000	272,000	351,000
CO41-PZM036	Bromochloromethane	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Bromodichloromethane	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Bromoform	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Bromomethane	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Carbon Disulfide	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	5 U	5 U	2.8 J	5 U	1.8 J	NS	1.9 J	5 U	5 U	2.1	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Carbon Tetrachloride	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Chlorobenzene	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	5 U	5 U	5 U	2.1 J	5 U	NS	5 U	5 U	5 U	3.1	NS	NS	NS	5 U	5 U	3.2 J	NS	NS	NS	NS
CO41-PZM036	Chloroethane	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Chloroform	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Chloromethane	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	cis-1,2-Dichloroethene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	cis-1,3-Dichloropropene	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Dibromochloromethane	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Dibromomethane	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Ethylbenzene	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	659	548	658	580	520	NS	675	919	898	847	NS	NS	NS	661	657	684	628	6.2	774	880
CO41-PZM036	Iodomethane	NS	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	250 U	250 U	250 U	5 U	5 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	3.8 J	250 U	250 U	50 U	NS	NS	NS	250 U	250 U	250 U	NS	NS	NS	NS
CO41-PZM036	Methyl tertiary-butyl ether	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Methylene Chloride	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	5 U	5 U	5 U	4.9 J	NS	4.6 JB	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Styrene	NS	395	480	489	328	416	562	397	529	474 IS	389	418	420	263	264	287	314	275	362	319	308	NS	362	459	462	446	NS	NS	NS	370	356	422	NS	NS	NS	NS
CO41-PZM036	Tetrachloroethene	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Toluene	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	40,500	37,000	55,700	66,700	71,800	NS	67,800	81,800	65,700	66,600	NS	NS	NS	67,600	71,100	76,200	168,000	893	90,700	118,000
CO41-PZM036	trans-1,2-Dichloroethene	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	trans-1,3-Dichloropropene	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	trans-1,4-Dichloro-2-butene	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	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	5 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO41-PZM036	Trichloroethene	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	4 J	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Trichlorofluoromethane	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Vinyl Acetate	NS	10 U	50 U	10 U	50 U	10 U	10 U	5 U	10 U	10 U	50 U	50 U	50 U	10 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Vinyl Chloride	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	5 U	5 U	NS	5 U	5 U	5 U	1 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO41-PZM036	Xylenes	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	11,500	10,300	16,900	13,300	11,300	NS	12,100	20,600	15,600	16,100	NS	NS	NS	13,500	13,600	14,500	28,300	308	16,700	27,300
CO41-PZM036	Naphthalene	NS	274	373	345	339	282	330	327	328	190 IS	235	256	322	239	234	306	325	303	385	327	382	NS	328	430	423	380	NS	NS	NS	325	295	357	370	195	418	290

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO42-PZM004	1,1,1,2-Tetrachloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,1,1-Trichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,1,2,2-Tetrachloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,1,2-Trichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,1-Dichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,1-Dichloroethene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,2,3-Trichloropropane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,2-Dibromo-3-chloropropane	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	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO42-PZM004	1,2-Dibromoethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,2-Dichlorobenzene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,2-Dichloroethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,2-Dichloropropane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	1,4-Dichlorobenzene	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	2-Butanone	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	10 U	10 U	10 U	10 U	10 U	NS	2.3 J	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO42-PZM004	2-Hexanone	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	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO42-PZM004	4-Methyl-2-pentanone	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	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO42-PZM004	Acetone	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	29	7.5 JB	7.2 J	23.6	10 U	NS	163	6.7 J	10 U	10 U	NS	NS	NS	7.3 J	10 U	10 U	NS	NS	NS	NS
CO42-PZM004	Acrylonitrile	NS	10 U	10 U	10 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	4 U	4 U	4 U	4 U	NS	NS	NS	4 U	4 U	4 U	NS	NS	NS	NS
CO42-PZM004	Benzene	NS	873	6,800 H5	5,030	1,390	650	681	526	390	661	1,130	1,100	1 U	738	1,220	215	72.5	51.5	294	5.8	1.1	NS	331	138	27.5	81.2	NS	NS	NS	3	187	6.1	1 U	15.9	59.4	169
CO42-PZM004	Bromochloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Bromodichloromethane	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 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Bromoform	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Bromomethane	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	0.78 JB	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Carbon Disulfide	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	1 U	1 U	0.87 J	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Carbon Tetrachloride	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Chlorobenzene	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Chloroethane	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Chloroform	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Chloromethane	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	1 U	1 U	1 U	1 U	1 U	NS	3.5	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	cis-1,2-Dichloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	cis-1,3-Dichloropropene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Dibromochloromethane	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Dibromomethane	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Ethylbenzene	NS	107	307	412	218	103	57.6	149	137	176	164	171	1 U	50.3	52.4	23.2	7.6	6.8	56.2	5.1	1 U	NS	62	23.6	5.9	8.4	NS	NS	NS	1 U	42.1	2.1	1 U	4.3	14.7	30.2
CO42-PZM004	Iodomethane	NS	5 U	250 U	5 U	50 U	1.1	1 U	50 U	1 U	1 U	50 U	50 U	50 U	1 U	1 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO42-PZM004	Methyl tertiary-butyl ether	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Methylene Chloride	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	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Styrene	NS	89.9	387	524	201	100	64.3	154	115	89.9	156	154	1 U	47.6	49.6	21.6	12.4	4.8	53	4.2	1 U	NS	51.6	24.3	3.9	4.4	NS	NS	NS	1 U	33.5	1.4	NS	NS	NS	NS
CO42-PZM004	Tetrachloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Toluene	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	205	107	615	10	1.4	NS	595	231	35.7	46.8	NS	NS	NS	2.9	462	7	1 U	24.4 ML	48.7	36
CO42-PZM004	trans-1,2-Dichloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	trans-1,3-Dichloropropene	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	trans-1,4-Dichloro-2-butene	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	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO42-PZM004	Trichloroethene	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 U	1 U	1 U	1 U	1 U	NS	1 U	0.3 JB	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Trichlorofluoromethane	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Vinyl Acetate	NS	10 U	50 U	10 U	10 U	2 U	2 U	10 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Vinyl Chloride	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 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO42-PZM004	Xylenes	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	219	72.3	409	39.5	1.4 J	NS	627	318	121	128	NS	NS	NS	7.4	286	9.2	3 U	37.2	84.9	129
CO42-PZM004	Naphthalene	NS	475	1,190	1,560	860	94.8 1c	235	847	633	3,650	755	763	6.1	188	155	93.8	22.1	25	210	5.9	2 U	NS	208	168	31.6	45.6	NS	NS	NS	9.7	154	4.9	2 U	9.3	66.7	109

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO43-PZM048	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	5 U	5 U	5 U	5 U	NS	5 U	500 U	5 U	25 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO43-PZM048	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	10 U	10 U	10 U	NS	10 U	1000 U	10 U	50 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO43-PZM048	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	10 U	10 U	10 U	NS	10 U	1000 U	10 U	50 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO43-PZM048	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	10 U	10 U	10 U	NS	10 U	1000 U	10 U	50 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO43-PZM048	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	18.3 J	4.2 J	10 U	10 U	8.4 J	NS	10 U	1000 U	8 J	50 U	NS	NS	NS	10 U	10 U	10 U	NS	NS	NS	NS
CO43-PZM048	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	4 U	4 U	4 U	4 U	NS	4 U	400 U	4 U	20 U	NS	NS	NS	4 U	4 U	4 U	NS	NS	NS	NS
CO43-PZM048	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,970	8.7	1 U	1 U	2,350	NS	12,100	5,260	9,850	1,940	NS	NS	NS	2,390	2.6	1 U	NS	1,330	NS	NS
CO43-PZM048	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	0.82 JB	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.3 J	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	0.41 J	1 U	NS	NS	NS	NS
CO43-PZM048	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.4	1 U	1 U	1 U	6.2	NS	23.1	100 U	18.2	8.4	NS	NS	NS	7.2	1 U	1 U	NS	5	NS	NS
CO43-PZM048	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	50 U	50 U	50 U	50 U	NS	50 U	5,000 U	50 U	250 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO43-PZM048	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	4.9 J	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	0.86 J	NS	3.5	100 U	1.5	5 U	NS	NS	NS	0.71 J	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	150	1 U	1 U	1 U	70.4	NS	471	484	53.4	31.1	NS	NS	NS	25.2	1 U	1 U	NS	3.5	NS	NS
CO43-PZM048	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	5 U	5 U	5 U	5 U	NS	5 U	500 U	5 U	25 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO43-PZM048	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	10 U	10 U	10 U	NS	10 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	1 U	1 U	1 U	NS	1 U	100 U	1 U	5 U	NS	NS	NS	1 U	1 U	1 U	NS	NS	NS	NS
CO43-PZM048	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	67.9	3 U	3 U	3 U	86	NS	324	300 U	146	112	NS	NS	NS	103	3 U	3 U	NS	30.9	NS	NS
CO43-PZM048	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	91.4	1.8 J	2 U	2 U	12.2	NS	86	345	141	537	NS	NS	NS	90.5	2 U	2 U	NS	32.7	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO44-PZM048	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	25 U	5 U	5 U	NS	NS	NS	25 U	25 U	5 U	NS	NS	NS	NS
CO44-PZM048	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	10 U	10 U	10 U	10 U	NS	10 U	50 U	10 U	10 U	NS	NS	NS	50 U	50 U	10 U	NS	NS	NS	NS
CO44-PZM048	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	10 U	10 U	10 U	10 U	NS	10 U	50 U	10 U	10 U	NS	NS	NS	50 U	50 U	10 U	NS	NS	NS	NS
CO44-PZM048	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	10 U	10 U	10 U	10 U	NS	10 U	50 U	10 U	10 U	NS	NS	NS	50 U	50 U	10 U	NS	NS	NS	NS
CO44-PZM048	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.8 J	4 J	10 U	10 U	7.1 J	NS	10 U	50 U	10 U	10 U	NS	NS	NS	50 U	50 U	10 U	NS	NS	NS	NS
CO44-PZM048	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4 U	4 U	4 U	4 U	4 U	NS	4 U	20 U	4 U	4 U	NS	NS	NS	20 U	20 U	4 U	NS	NS	NS	NS
CO44-PZM048	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	5,830	10.8 B	4,960	1 U	NS	NS	NS	2,660	3 J	2,630	NS	4,490	NS	NS
CO44-PZM048	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	4.2 J	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	0.31 J	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	2.4 J	1 U	NS	NS	NS	NS
CO44-PZM048	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	24	5 U	20.3	1 U	NS	NS	NS	11	5 U	12.8	NS	17	NS	NS
CO44-PZM048	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	50 U	50 U	50 U	NS	50 U	250 U	50 U	50 U	NS	NS	NS	250 U	250 U	50 U	NS	NS	NS	NS
CO44-PZM048	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	4.1	5 U	3.7	1 U	NS	NS	NS	5 U	5 U	1.4	NS	NS	NS	NS
CO44-PZM048	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	76.6	5 U	85.9	1 U	NS	NS	NS	73.3	5 U	54.9	NS	85	NS	NS
CO44-PZM048	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	25 U	5 U	5 U	NS	NS	NS	25 U	25 U	5 U	NS	NS	NS	NS
CO44-PZM048	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	1.5 J	1 U	NS	NS	NS	NS
CO44-PZM048	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	10 U	10 U	10 U	10 U	NS	10 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO44-PZM048	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3 U	3 U	3 U	3 U	3 U	NS	175	15 U	149	3 U	NS	NS	NS	81.8	15 U	91.9	NS	141	NS	NS
CO44-PZM048	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	2 U	2 U	2 U	2.7	NS	203	10 U	182	7.5	NS	NS	NS	134	10 U	118	NS	197	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO45-PZM047	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	25 U	5 U	5 U	NS	NS	NS	25 U	25 U	5 U	NS	NS	NS	NS
CO45-PZM047	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	10 U	10 U	10 U	10 U	NS	10 U	50 U	10 U	10 U	NS	NS	NS	50 U	50 U	10 U	NS	NS	NS	NS
CO45-PZM047	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	10 U	10 U	10 U	10 U	NS	10 U	50 U	10 U	10 U	NS	NS	NS	50 U	50 U	10 U	NS	NS	NS	NS
CO45-PZM047	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	10 U	10 U	10 U	10 U	NS	10 U	50 U	10 U	10 U	NS	NS	NS	50 U	50 U	10 U	NS	NS	NS	NS
CO45-PZM047	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3 J	3.5 J	3.3 J	10 U	10 U	NS	10 U	50 U	10 U	10 U	NS	NS	NS	50 U	50 U	10 U	NS	NS	NS	NS
CO45-PZM047	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4 U	4 U	4 U	4 U	4 U	NS	4 U	20 U	4 U	4 U	NS	NS	NS	20 U	20 U	4 U	NS	NS	NS	NS
CO45-PZM047	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	117	21.6	0.76 J	762	609	NS	10,200	1,870	201	5.1	NS	NS	NS	1,150	5 U	1 U	NS	541	NS	NS
CO45-PZM047	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 B	1 U	NS	NS	NS	5 U	5 U	0.74 J1c	NS	NS	NS	NS
CO45-PZM047	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	2.4 J	1 U	NS	NS	NS	NS
CO45-PZM047	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1.1	0.86 J	NS	50.6	5 U	1.1	1 U	NS	NS	NS	5 U	5 U	1 U	NS	1	NS	NS
CO45-PZM047	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	50 U	50 U	50 U	NS	50 U	250 U	50 U	50 U	NS	NS	NS	250 U	250 U	50 U	NS	NS	NS	NS
CO45-PZM047	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	4.6	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	11.3	2	NS	237	3.1 J	0.49 J	1 U	NS	NS	NS	5 U	5 U	1 U	NS	0.6 J	NS	NS
CO45-PZM047	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	25 U	5 U	5 U	NS	NS	NS	25 U	25 U	5 U	NS	NS	NS	NS
CO45-PZM047	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	10 U	10 U	10 U	10 U	NS	10 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	1 U	1 U	1 U	1 U	NS	1 U	5 U	1 U	1 U	NS	NS	NS	5 U	5 U	1 U	NS	NS	NS	NS
CO45-PZM047	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3 U	3 U	3 U	6.7	4.4	NS	390	8.6 J	1.7 J	3 U	NS	NS	NS	15 U	15 U	3 U	NS	2.1 J	NS	NS
CO45-PZM047	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2 U	2 U	2 U	16.3	13.5	NS	90.7	45.6	7.2	0.99 J	NS	NS	NS	40	10 U	2 U	NS	12.9	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO46-PZM047	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	250 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO46-PZM047	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	500 U	NS	NS	NS	50 U	50 U	12 J	NS	NS	NS	NS
CO46-PZM047	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	500 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO46-PZM047	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	500 U	NS	NS	NS	50 U	50 U	50 U	NS	NS	NS	NS
CO46-PZM047	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20.7 J	22.3 J	16.3 J	45.3 J	25.1 J	NS	25.8 J	50 U	39.7 J	500 U	NS	NS	NS	50 U	53.5	60.9	NS	NS	NS	NS
CO46-PZM047	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	20 U	20 U	20 U	20 U	NS	20 U	20 U	20 U	200 U	NS	NS	NS	20 U	20 U	20 U	NS	NS	NS	NS
CO46-PZM047	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	104,000	4,080	703	172,000	148,000	NS	268,000	269,000	192,000	153,000	NS	NS	NS	150,000	29,200	49,600	NS	82,600	NS	NS
CO46-PZM047	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	1.7 J	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	382	57.6	12.2	576	494	NS	840	840	734	617	NS	NS	NS	674	229	241	NS	401	NS	NS
CO46-PZM047	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	250 U	250 U	250 U	250 U	NS	250 U	250 U	250 U	2,500 U	NS	NS	NS	250 U	250 U	250 U	NS	NS	NS	NS
CO46-PZM047	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	7.7 B	5 U	NS	5 U	5 U	5 U	52.5	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	69.5	9.1	5 U	16.9	38.8	NS	148	189	135	82.2	NS	NS	NS	65.7	26.4	21.9	NS	NS	NS	NS
CO46-PZM047	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,210	478	174	7,330	13,600	NS	33,700	52,600	27,000	15,200	NS	NS	NS	16,800	2,270	1,350	NS	19,500	NS	NS
CO46-PZM047	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	250 U	NS	NS	NS	25 U	25 U	25 U	NS	NS	NS	NS
CO46-PZM047	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	1.7 J	5 U	NS	NS	NS	NS
CO46-PZM047	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	50 U	50 U	50 U	NS	50 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	5 U	NS	NS	NS	NS
CO46-PZM047	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,280	528	123	3,240	3,850	NS	10,100	13,100	6,870	4,760	NS	NS	NS	4,810	1,320	1,170	NS	5,410	NS	NS
CO46-PZM047	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,550	210	63.2	475	604	NS	4,980	12,200	2,530	2,540	NS	NS	NS	974	726	614	NS	636	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO47-PZM046	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	5 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	250 U	NS	NS	NS	25 U	25 U	NS	NS	NS	NS	NS
CO47-PZM046	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	50 U	21.6 J	12.8 J	NS	50 U	50 U	50 U	500 U	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS
CO47-PZM046	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	500 U	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS
CO47-PZM046	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	50 U	2.2 J	50 U	NS	50 U	50 U	50 U	500 U	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS
CO47-PZM046	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40.6 J	11.8	30.2 J	179	100	NS	34.6 JB	50 U	71.8	500 U	NS	NS	NS	32.2 J	40.5 J	NS	NS	NS	NS	NS
CO47-PZM046	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	4 U	20 U	20 U	20 U	NS	20 U	20 U	20 U	200 U	NS	NS	NS	20 U	20 U	NS	NS	NS	NS	NS
CO47-PZM046	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	24,200	211	1,390	12,400	15,900	NS	37,600	153,000	28,900	185,000	NS	NS	NS	194,000	31,800	NS	NS	208,000	NS	NS
CO47-PZM046	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	30.7	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.5 J	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	209	5.8	27.3	160	181	NS	328	219	315	449	NS	NS	NS	380	292	NS	NS	463	NS	NS
CO47-PZM046	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	50 U	250 U	250 U	250 U	NS	250 U	250 U	250 U	2,500 U	NS	NS	NS	250 U	250 U	NS	NS	NS	NS	NS
CO47-PZM046	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	8.9 B	5 U	NS	4.4 JB	5 U	5 U	48.5 J	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	289	3.8	12.7	135	188	NS	390	13.8	243	102	NS	NS	NS	139	204	NS	NS	NS	NS	NS
CO47-PZM046	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,530	91.3	389	4,370	5,640	NS	9,830	5,280	7,800	17,100	NS	NS	NS	22,600	7,540	NS	NS	17,900	NS	NS
CO47-PZM046	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	5 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	250 U	NS	NS	NS	25 U	25 U	NS	NS	NS	NS	NS
CO47-PZM046	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	10 U	50 U	50 U	50 U	NS	50 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	1 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	50 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO47-PZM046	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,760	166	260	1,730	1,790	NS	2,700	1,190	2,730	4,020	NS	NS	NS	3,610	2,300	NS	NS	4,260	NS	NS
CO47-PZM046	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,220	54.8	98.2	809	959	NS	1,450	541	1,180	1,010	NS	NS	NS	685	1,290	NS	NS	561	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO48-PZM044	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	NS	NS	NS	25 U	25 U	NS	NS	NS	NS	NS
CO48-PZM044	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS
CO48-PZM044	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS
CO48-PZM044	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS
CO48-PZM044	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	14.7 J	20.2 J	17.9 J	17 J	50 U	NS	22.9 JB	50 U	67.8	50 U	NS	NS	NS	50 U	50 U	NS	NS	NS	NS	NS
CO48-PZM044	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	20 U	20 U	20 U	20 U	NS	20 U	20 U	20 U	20 U	NS	NS	NS	20 U	20 U	NS	NS	NS	NS	NS
CO48-PZM044	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,400	53,800	4,550	13,900	15,200	NS	15,300	22,900	13,200	12,600	NS	NS	NS	15,200	16,800	NS	NS	21,600	NS	NS
CO48-PZM044	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.6 J	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	212	188	102	237	259	NS	331	325	298	236	NS	NS	NS	224	237	NS	NS	261	NS	NS
CO48-PZM044	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	250 U	250 U	250 U	250 U	NS	250 U	250 U	250 U	250 U	NS	NS	NS	250 U	250 U	NS	NS	NS	NS	NS
CO48-PZM044	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	6.6 B	5 U	NS	4 JB	5 U	5 U	4.2 J	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	332	244	114	316	384	NS	481	516	442	345	NS	NS	NS	309	309	NS	NS	NS	NS	NS
CO48-PZM044	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,140	31,600	3,120	7,820	8,750	NS	9,130	11,800	7,770	6,840	NS	NS	NS	7,990	8,490	NS	NS	10,200	NS	NS
CO48-PZM044	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	NS	NS	NS	25 U	25 U	NS	NS	NS	NS	NS
CO48-PZM044	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	1.6 J	NS	NS	NS	NS	NS
CO48-PZM044	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	50 U	50 U	50 U	50 U	NS	50 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	NS	NS	NS	5 U	5 U	NS	NS	NS	NS	NS
CO48-PZM044	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,800	1,610	872	1,990	2,090	NS	2,690	2,810	2,330	1,940	NS	NS	NS	1,880	2,010	NS	NS	2,260	NS	NS
CO48-PZM044	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,480	1,100	515	1,170	1,470	NS	1,670	1,630	1,440	1,300	NS	NS	NS	1,190	1,180	NS	NS	1,250	NS	NS

Appendix D
Cell 2 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	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	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	2/5/2020	3/9/2020	3/26/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
GD01-MWI	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	21.1	NS	NS	NS	NS	10	10.3	16.9
GD01-MWI	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	1 U	1 U	1 U
GD01-MWI	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	1 U	1 U	0.41 J
GD01-MWI	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS
GD01-MWI	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3 U	NS	NS	NS	NS	3 U	3 U	3 U
GD01-MWI	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	2 U	2 U	2 U
GD02-MWI	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	146,000 MH	NS	NS	NS	NS	NS	NS	78,200	71,200	127,000
GD02-MWI	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	478 ML	NS	NS	NS	NS	NS	452	344	546
GD02-MWI	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	455 ML	NS	NS	NS	NS	NS	24	84.7	339
GD02-MWI	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
GD02-MWI	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,390	NS	NS	NS	NS	NS	575	208	327
GD02-MWI	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	216 M6	NS	NS	NS	NS	NS	1,840	3,530 CH	1,910

Appendix D
Cell 3 Historical Data Summary

Client Sample ID	Parameter	2/1/2013	5/1/2013	8/1/2013	12/1/2013	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	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO194-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	75.4	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,290 ML	NS	1,160	NS	NS	NS	NS	NS	NS	800	823	944
CO194-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.8 J	NS	4.8 J	NS	NS	NS	NS	NS	NS	4.5 J	5.2	5 J
CO194-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	160	NS	141	NS	NS	NS	NS	NS	NS	108	119	144
CO194-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO194-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	75.1	NS	70.9	NS	NS	NS	NS	NS	NS	60.4	65.9	73.9
CO194-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400 B1c	NS	2,450	NS	NS	NS	NS	NS	NS	2,240	7,540 CH	3,260

Appendix D
Cell 3 Historical Data Summary

Client Sample ID	Parameter	2/1/2013	5/1/2013	8/1/2013	12/1/2013	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	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO195-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	46,300	NS	54,100	NS	NS	NS	NS	NS	67,300	18,000	53,900	59,000
CO195-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	83.5	NS	85.3	NS	NS	NS	NS	NS	69.6	21.8	76.2	82.3
CO195-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,140	NS	4,320	NS	NS	NS	NS	NS	5,540	1,220	3,350	4,340
CO195-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO195-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,120	NS	1,170	NS	NS	NS	NS	NS	930	305	980	1,160
CO195-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,530 B1c	NS	4,850	NS	NS	NS	NS	NS	1,650	493	3,940 CH	2,400

Appendix D
Cell 3 Historical Data Summary

Client Sample ID	Parameter	2/1/2013	5/1/2013	8/1/2013	12/1/2013	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	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO196-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16,400	NS	11,200	NS	NS	NS	NS	NS	NS	24,400	13,200	16,500
CO196-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	33.6	NS	19.3	NS	NS	NS	NS	NS	NS	26.7	20.9	21.8
CO196-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,330	NS	978	NS	NS	NS	NS	NS	NS	1,370	836	1,080
CO196-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO196-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	395	NS	253	NS	NS	NS	NS	NS	NS	329	239	240
CO196-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,400 L1B	NS	2,420	NS	NS	NS	NS	NS	NS	591	1,190 CH	969

Appendix D
Cell 3 Historical Data Summary

Client Sample ID	Parameter	2/1/2013	5/1/2013	8/1/2013	12/1/2013	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	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO198-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	60.8	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	748	NS	841	NS	NS	NS	NS	NS	NS	677	636	697
CO198-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.6 J	NS	4.3 J	NS	NS	NS	NS	NS	NS	5.4	4.7 J	5.7
CO198-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	145	NS	124	NS	NS	NS	NS	NS	NS	115	111	129
CO198-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO198-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	71.3	NS	59.6	NS	NS	NS	NS	NS	NS	62.5	60.3	66.1
CO198-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,650 B1c	NS	3,170	NS	NS	NS	NS	NS	NS	5,590	17,000 CH	3,490

Appendix D
Cell 3 Historical Data Summary

Client Sample ID	Parameter	2/1/2013	5/1/2013	8/1/2013	12/1/2013	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	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO201-MWS	1,1,1,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,2-Dibromoethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Acrylonitrile	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	145	NS	1,720	NS	NS	NS	NS	NS	NS	2,420	3,880	13,900
CO201-MWS	Bromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Dibromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.97 J	NS	4.9	NS	NS	NS	NS	NS	NS	5.3	6.5	19.7
CO201-MWS	Iodomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Methyl tertiary-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Methylene Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.97 J	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	12.7	NS	130	NS	NS	NS	NS	NS	NS	266	272	904
CO201-MWS	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	trans-1,4-Dichloro-2-butene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 U	NS	NS	NS	NS	NS	NS	NS	NS	NS
CO201-MWS	Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9.8	NS	61	NS	NS	NS	NS	NS	NS	93.1	106	245
CO201-MWS	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,840 B1c	NS	168	NS	NS	NS	NS	NS	NS	276	692 CH	702

Appendix D
Cell 3 Historical Data Summary

Client Sample ID	Parameter	2/1/2013	5/1/2013	8/1/2013	12/1/2013	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	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO30-PZM015	1,1,1,2-Tetrachloroethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	1,1,1-Trichloroethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	1,1,2,2-Tetrachloroethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	1,1,2-Trichloroethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	1,1-Dichloroethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	1,1-Dichloroethene	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	1,2,3-Trichloropropane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	1,2-Dibromo-3-chloropropane	5 U	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	5 U	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	NS	NS	NS
CO30-PZM015	1,2-Dibromoethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	1,2-Dichlorobenzene	NS	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	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	NS	NS	NS	NS
CO30-PZM015	1,2-Dichloroethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	1,2-Dichloropropane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	1,4-Dichlorobenzene	NS	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	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	NS	NS	NS	NS
CO30-PZM015	2-Butanone	10 U	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	25 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO30-PZM015	2-Hexanone	10 U	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	25 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO30-PZM015	4-Methyl-2-pentanone	10 U	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	25 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO30-PZM015	Acetone	10 U	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	159	50 U	22.3 J	19.3 J	50 U	50 U	23.9 J	NS	167	50 U	32.8 J	28.4 J	50 U	50 U	35 JH1	NS	NS	NS	NS
CO30-PZM015	Acrylonitrile	2 U	2 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	4 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	20 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	NS	NS	NS
CO30-PZM015	Benzene	74,100	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	88,400	67,500	50,800	72,700	25,500	70,300	51,000	NS	69,900	53,300	56,300	63,900	59,300	66,400	75,800 H1	98,700	64,000	678	57,000
CO30-PZM015	Bromochloromethane	NS	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	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	NS	NS	NS	NS
CO30-PZM015	Bromodichloromethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Bromoform	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Bromomethane	1 U	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	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	7.4 CL	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO30-PZM015	Carbon Disulfide	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Carbon Tetrachloride	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Chlorobenzene	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Chloroethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Chloroform	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Chloromethane	1 U	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	5 U	5 U	5 U	5 U	5 U	5 U	NS	5.5	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO30-PZM015	cis-1,2-Dichloroethene	NS	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	6	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	NS	NS	NS	NS
CO30-PZM015	cis-1,3-Dichloropropene	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Dibromochloromethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Dibromomethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Ethylbenzene	110	101	95.5	120	81.5	101	94.4	117	96.8	107	85.4	115	124	101 IS	100	88.9	71.3	118	102	84.5	95.4	39.9	111	87.3	NS	117	84.8	133	121	93.9	89.7	130 H1	105	95.2	5 U	94.6
CO30-PZM015	Iodomethane	50 U	50 U	5 U	5 U	5 U	5 U	250 U	5 U	250 U	1 U	5 U	5 U	5 U	5 U	250 U	29.2 J	250 U	5 U	250 U	250 U	250 U	250 U	250 U	NS	250 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	NS	NS	NS
CO30-PZM015	Methyl tertiary-butyl ether	NS	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	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	NS	NS	NS	NS
CO30-PZM015	Methylene Chloride	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Styrene	34.5	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	18.3	15.5	12.3	15.3	5.4	16	13.9	NS	15.1	11.7	17.7	17.1	11.5	12.5	14.7 H1	NS	NS	NS	NS
CO30-PZM015	Tetrachloroethene	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Toluene	4,680	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	5,860	4,720	3,190	5,020	1,410	5,460	3,890	NS	5,110	4,560	4,240	4,710	4,100	4,800	5,550 H1	7,990	16,300	49.1	4,650
CO30-PZM015	trans-1,2-Dichloroethene	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	trans-1,3-Dichloropropene	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	trans-1,4-Dichloro-2-butene	5 U	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	5 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	NS	NS	NS
CO30-PZM015	Trichloroethene	1 U	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	5 U	5 U	5 U	5 U	4.7 J	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO30-PZM015	Trichlorofluoromethane	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Vinyl Acetate	10 U	10 U	5 U	5 U	15 U	10 U	50 U	10 U	50 U	2 U	10 U	5 U	10 U	10 U	50 U	50 U	50 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO30-PZM015	Vinyl Chloride	1 U	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	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	NS	NS	NS	NS
CO30-PZM015	Xylenes	1,230	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	1,620	1,440	1,210	1,290	572	1,500	1,190	NS	1,590	1,230	1,840	1,650	1,310	1,200	1,910	1,480	1,360	17.9	1,380
CO30-PZM015	Naphthalene	NS	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	3,560	3,440	1,720	1,980	1,020	4,660	2,710	NS	9,090	8,640	5,540	17,100	2,320	1,830	3,130 H1	8,420	1,790	542 CH	2,300

Appendix D
Cell 3 Historical Data Summary

Client Sample ID	Parameter	2/1/2013	5/1/2013	8/1/2013	12/1/2013	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	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	5/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO30-PZM060	1,1,1,2-Tetrachloroethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,1,1-Trichloroethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,1,2,2-Tetrachloroethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,1,2-Trichloroethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,1-Dichloroethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,1-Dichloroethene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,2,3-Trichloropropane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,2-Dibromo-3-chloropropane	NS	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	1 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	NS	NS	NS	NS
CO30-PZM060	1,2-Dibromoethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,2-Dichlorobenzene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,2-Dichloroethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,2-Dichloropropane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	1,4-Dichlorobenzene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	2-Butanone	NS	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	5 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	1.9 J	10 U	10 U	10 U	NS	NS	NS	NS
CO30-PZM060	2-Hexanone	NS	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	5 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	1.3 J	1.2 J	1.5 J	10 U	10 U	NS	NS	NS	NS
CO30-PZM060	4-Methyl-2-pentanone	NS	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	5 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS
CO30-PZM060	Acetone	NS	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	58.8	10 U	3.6 J	4.5 JR1	10 U	3.1 J	4.7 J	NS	187	10 U	5.8 J	10 U	9.5 J	10 U	10 U	NS	NS	NS	NS
CO30-PZM060	Acrylonitrile	NS	NS	NS	NS	NS	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	NS	NS	NS
CO30-PZM060	Benzene	NS	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	5.2	8.1	19.2	16.9	80.4	22.2	4.2	NS	85.5	321	49.8 MH	9	7.5	15	19.5 H1	NS	9.2	NS	NS
CO30-PZM060	Bromochloromethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Bromodichloromethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Bromoform	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Bromomethane	NS	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	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	0.77 JH11c	NS	NS	NS	NS
CO30-PZM060	Carbon Disulfide	NS	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	1 U	1 U	1 U	1 U	0.38 J	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO30-PZM060	Carbon Tetrachloride	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Chlorobenzene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Chloroethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Chloroform	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Chloromethane	NS	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	1 U	1.3	1 U	1 U	1 U	1 U	NS	4.9	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO30-PZM060	cis-1,2-Dichloroethene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	cis-1,3-Dichloropropene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Dibromochloromethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Dibromomethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Ethylbenzene	NS	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	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	0.62 J	1 U	1 U	1 U	1 U	1 U	NS	1.9	NS	NS
CO30-PZM060	Iodomethane	NS	NS	NS	NS	NS	1 U	50 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	50 U	50 U	50 U	1 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO30-PZM060	Methyl tertiary-butyl ether	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Methylene Chloride	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Styrene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Tetrachloroethene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Toluene	NS	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	1.2	1 U	1 U	1 U	1.8	1 U	1 U	NS	2	20.6	1 U	1 U	1 U	1 U	1 U	NS	23.3	NS	NS
CO30-PZM060	trans-1,2-Dichloroethene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	trans-1,3-Dichloropropene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	trans-1,4-Dichloro-2-butene	NS	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	1 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	NS	NS	NS	NS
CO30-PZM060	Trichloroethene	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Trichlorofluoromethane	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Vinyl Acetate	NS	NS	NS	NS	NS	2 U	10 U	2 U	10 U	2 U	2 U	1 U	2 U	2 U	10 U	10 U	10 U	2 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO30-PZM060	Vinyl Chloride	NS	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	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	NS	NS	NS	NS
CO30-PZM060	Xylenes	NS	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	1 U	3 U	3 U	3 U	3 U	3 U	NS	3 U	9.6	3 U	3 U	3 U	3 U	3 U	NS	11.2	NS	NS
CO30-PZM060	Naphthalene	NS	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	2 J	2 U	2 U	2 U	2 U	2 U	NS	1.5 J	29	2 U	19.2	2 U	2 U	2 U	NS	1.3 J	NS	NS

Appendix D
Cell 5 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO23-PZM008	1,1,1,2-Tetrachloroethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,1,1-Trichloroethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,1,2-Trichloroethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,1-Dichloroethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,1-Dichloroethene	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,2,3-Trichloropropane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,2-Dibromo-3-chloropropane	NS	5 U	25 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	25 U	25 U	25 U	25 U	500 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	NS	NS	NS
CO23-PZM008	1,2-Dibromoethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,2-Dichlorobenzene	NS	5 U	NS	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,2-Dichloroethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,2-Dichloropropane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	1,4-Dichlorobenzene	NS	5 U	NS	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	2-Butanone	NS	25 U	50 U	25 U	NS	25 U	25 U	5 U	25 U	NS	NS	NS	NS	25 U	50 U	50 U	50 U	50 U	1000 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO23-PZM008	2-Hexanone	NS	25 U	50 U	25 U	NS	25 U	25 U	5 U	25 U	NS	NS	NS	NS	25 U	50 U	50 U	50 U	50 U	1000 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO23-PZM008	4-Methyl-2-pentanone	NS	25 U	50 U	25 U	NS	25 U	25 U	5 U	25 U	NS	NS	NS	NS	25 U	50 U	50 U	50 U	50 U	1000 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO23-PZM008	Acetone	NS	108	50 U	25 U	NS	25 U	25 U	5 U	25 U	NS	NS	NS	NS	67.7	19.3 J	14.5 J	37.2 JB	17.7 J	1000 U	27.9 J	28.9 JB	50 U	79	43.4 J	50 U	50 U	50 U	NS	NS	NS	NS
CO23-PZM008	Acrylonitrile	NS	10 U	10 U	10 U	NS	20 U	20 U	4 U	20 U	NS	NS	NS	NS	20 U	20 U	20 U	20 U	20 U	400 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	NS	NS	NS
CO23-PZM008	Benzene	NS	1,380	991	947	NS	531	428	727	636	NS	NS	NS	NS	564	657	600	403	163	264	460	404	152	599	666	431	473	495	489	567	377	606
CO23-PZM008	Bromochloromethane	NS	5 U	NS	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Bromodichloromethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Bromoform	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Bromomethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5.1 R1	8.7 CL	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Carbon Disulfide	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Carbon Tetrachloride	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Chlorobenzene	NS	5 U	5 U	5 U	NS	5 U	5 U	1.1	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Chloroethane	NS	5 U	5 U	9.2	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Chloroform	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Chloromethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	cis-1,2-Dichloroethene	NS	5 U	NS	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	2.2 J	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	cis-1,3-Dichloropropene	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Dibromochloromethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Dibromomethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Ethylbenzene	NS	38.7	42.1	52.3	NS	22.2	17.3	54.4	31.6	NS	NS	NS	NS	23.2	34.2	25	16.8	10	100 U	22.5	19.6	8.9	27.8	28.6	21.3	18.6	24.7	25	31.5	23.3	32.6
CO23-PZM008	Iodomethane	NS	5 U	250 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	250 U	250 U	250 U	250 U	5,000 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	NS	NS	NS
CO23-PZM008	Methyl tertiary-butyl ether	NS	5 U	NS	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Methylene Chloride	NS	11.8	5 U	6	NS	6.6 B	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	160 B	5 U	4.2 JB	5 U	5 U	4.6 J	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Styrene	NS	37.8	46.6	51.5	NS	10.7	9.1	51.8	21.1	NS	NS	NS	NS	19.8	30.2	22.1	8.4	5.7	100 U	17.3	15.8	3.7 J	25.4	27.6	16.7	15	22.9	NS	NS	NS	NS
CO23-PZM008	Tetrachloroethene	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Toluene	NS	501	603	604	NS	276	217	424	413	NS	NS	NS	NS	217	374	310	26.8	20.3	56.8 J	197	181	30.7	303	344	201	172	244	293	357	217	343
CO23-PZM008	trans-1,2-Dichloroethene	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	trans-1,3-Dichloropropene	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	trans-1,4-Dichloro-2-butene	NS	5 U	25 U	5 U	NS	15.1 J	5 U	1 U	5 U	NS	NS	NS	NS	5 U	25 U	25 U	25 U	25 U	500 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	NS	NS	NS
CO23-PZM008	Trichloroethene	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	3.6 J	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Trichlorofluoromethane	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Vinyl Acetate	NS	10 U	50 U	10 U	NS	10 U	10 U	1 U	10 U	NS	NS	NS	NS	10 U	50 U	50 U	50 U	50 U	1000 U	50 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Vinyl Chloride	NS	5 U	5 U	5 U	NS	5 U	5 U	1 U	5 U	NS	NS	NS	NS	5 U	5 U	5 U	5 U	5 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO23-PZM008	Xylenes	NS	624	809	840	NS	383	300	855	474	NS	NS	NS	NS	373	543	392	265	152	150 J	332	314	140	431	465	363	289	399	434	539	374	525
CO23-PZM008	Naphthalene	NS	39,500	3,110	3,590	NS	886 H21c	1,210	2,960	9,640	NS	NS	NS	NS	4,260	4,300	3,780	2,630	3,870	5,800	2,760	1,720	1,620 MH	3,250	5,950	3,200	1,860	2,460 L1BE	4,090	2,770	4,450	4,120

Appendix D
Cell 5 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO24-PZM007	1,1,1,2-Tetrachloroethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,1,1-Trichloroethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,1,2,2-Tetrachloroethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,1,2-Trichloroethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,1-Dichloroethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,1-Dichloroethene	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,2,3-Trichloropropane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,2-Dibromo-3-chloropropane	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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO24-PZM007	1,2-Dibromoethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,2-Dichlorobenzene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,2-Dichloroethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,2-Dichloropropane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	1,4-Dichlorobenzene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	2-Butanone	NS	25 U	10 U	25 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	3.5 J	10 U	10 U	10 U	10 U	10 U	3.4 J	10 U	10 U	3.9 J	10 U	10 U	10 U	NS	NS	NS	NS
CO24-PZM007	2-Hexanone	NS	25 U	10 U	25 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.7 J	1.2 J	10 U	10 U	NS	NS	NS	NS
CO24-PZM007	4-Methyl-2-pentanone	NS	25 U	10 U	25 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS
CO24-PZM007	Acetone	NS	28.8	10 U	25 U	10 U	5 U	9 J	5 U	5 U	10.2	5.2 J	35.6	22.7 L2	47.8	23.2	4.8 J	14.4 B	9 J	41.4	11.2	16.7 B	18.1	10 J	16	15.8	10.4	16.4 M5	NS	NS	NS	NS
CO24-PZM007	Acrylonitrile	NS	10 U	2 U	10 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	NS	NS	NS
CO24-PZM007	Benzene	NS	452	25.6	5.3	4.9	4.8	5.7	6.2	5.3	7.5	5.2	5	3.7	5.1	4.4	1 U	2.6	2.9	1.8 C8	1.5 C8	1.3	160	1 U	3	3.2	2.1	1.3 M5	2.2	2.9	2.3	2.3
CO24-PZM007	Bromochloromethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Bromodichloromethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Bromoform	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Bromomethane	NS	5 U	1 U	5 U	1 U	1 U	2.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	1 U	1 U	1 U	1 U	0.83 J	1 JCL	1 U	1 JCL	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Carbon Disulfide	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Carbon Tetrachloride	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Chlorobenzene	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.27 J	1 U	1 U	0.35 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Chloroethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Chloroform	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Chloromethane	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4	1 U	1 U	0.84 J	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	cis-1,2-Dichloroethene	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 U	0.78 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	cis-1,3-Dichloropropene	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Dibromochloromethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Dibromomethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Ethylbenzene	NS	5 U	4.1	7.4	7	7.2	8	6.6	5.5	8.6	4.2	4.5	2.8	7.4	4.1	1.6	6.8	8.6	8.8	5.4	5.7	6	4.5	5.2	4.6	2.8	3.2 M5	2.8	1.9	3.6	2.1
CO24-PZM007	Iodomethane	NS	5 U	50 U	5 U	50 U	1 U	7.3 J	1 U	1 U	50 U	50 U	50 U	1 U	1 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	1.2 JIHM5	NS	NS	NS	NS
CO24-PZM007	Methyl tertiary-butyl ether	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Methylene Chloride	NS	7.4	1 U	5.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Styrene	NS	5 U	2.8	5 U	1 U	1.3	1.5	1.2	1 U	1.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.56 J	1 U	1 U	1 U	0.55 J	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Tetrachloroethene	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Toluene	NS	8.2	45.8	5 U	4.4	4.2	4.8	4.6	4.1	5.5	2.9	3.4	2.4	3.5	3.7	1.3	2.9	2.5	2.1 C8	1.3	1.2	37.3	1.6	1.9	1.9	1.3	1 M5	1.4	1.9	1.4	1.4
CO24-PZM007	trans-1,2-Dichloroethene	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	trans-1,3-Dichloropropene	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	trans-1,4-Dichloro-2-butene	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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO24-PZM007	Trichloroethene	NS	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.49 J	1 U	1 U	1.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Trichlorofluoromethane	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Vinyl Acetate	NS	10 U	10 U	10 U	10 U	2 U	2 U	1 U	2 U	10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Vinyl Chloride	NS	5 U	1 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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO24-PZM007	Xylenes	NS	11.1	30.6	16.7	16.6	17	18	15.1	12.2	18.1	9.8	10.9	6.7	13	8.5	3	9.3	11.5	10.9	7.2	7.4	21.5	5.9	7.3	6.7	4.1	3.3 M5	4.3	3.5	4.3	3
CO24-PZM007	Naphthalene	NS	1,490	3,390	3,030	3,090	2,810	2,830	3,380	3,950	3,300	5,870	5,900 L1	2,130	4,160	2,360	383	2,090	3,860	4,220	2,190	3,230	4,070	2,190	3,250	2,620	1,110 CL	9,230 M5	3,780	1,320	6,510	2,390

Appendix D
Cell 5 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO26-PZM007	1,1,1,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,2,3-Trichloropropane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,2-Dibromo-3-chloropropane	1 U	1 U	5 U	1 U	5 U	50 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO26-PZM007	1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,2-Dichlorobenzene	11.4 U	1 U	NS	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	1,4-Dichlorobenzene	11.4 U	1 U	NS	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	2-Butanone	5 U	5 U	10 U	5 U	10 U	125 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	0.87 J	10 U	10 U	10 U	10 U	10 U	NS	10 U	2.8 J	4.3 J	10 U	10 U	NS	NS	NS	NS
CO26-PZM007	2-Hexanone	5 U	5 U	10 U	5 U	10 U	125 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	2.8 J	2.4 J	1.9 J	10 U	10 U	NS	NS	NS	NS
CO26-PZM007	4-Methyl-2-pentanone	5 U	5 U	10 U	5 U	10 U	125 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	10 U	6.8 J	10 U	NS	NS	NS	NS
CO26-PZM007	Acetone	5 U	5 U	10 U	5 U	10 U	625 U	5 U	5 U	5 U	3.1 J	10 U	10 U	5 U	38.7	5.3 J	8.8 J	10 U	2.9 J	5.7 J	10 U	4.8 JB	NS	11.4	11	27.9	10 U	16.2 M5	NS	NS	NS	NS
CO26-PZM007	Acrylonitrile	2 U	2 U	2 U	2 U	2 U	NS	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	4 U	4 U	4 U	4 U	4 U	NS	NS	NS	NS
CO26-PZM007	Benzene	449	197	2,120	1 U	1 U	406	231	129	365	288	324	410	1 U	351	366	218	281	205	276	98.2	201	NS	314	3.4	163	331	3.5 M5	94.3	43.6 ML	165	327
CO26-PZM007	Bromochloromethane	1 U	1 U	NS	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Bromoform	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Bromomethane	1 U	1 U	1 U	1 U	1 U	50 U	2.7	1 U	3.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2	NS	2.1 B	1 U	1 U	1 U	0.76 JM5	NS	NS	NS	NS
CO26-PZM007	Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	50 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Chlorobenzene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U	0.3 J	0.18 J	0.21 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	0.78 J	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Chloroethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Chloroform	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Chloromethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	cis-1,2-Dichloroethene	1 U	1 U	NS	1 U	1 U	25 U	0.43 J	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 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Dibromomethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Ethylbenzene	18.5	1 U	15.1	1 U	1 U	14.2 J	8.9	5.2	16	10.6	10.1	14.7	1 U	11.3	13.1	7.7	8.6	10.9	12.4	4.2	9.8	NS	14.1	1 U	6.1	10.9	1 U	3.5	1.9	6	10.7
CO26-PZM007	Iodomethane	1 U	1 U	50 U	1 U	50 U	125 U	8.1 J	1 U	1 U	50 U	50 U	50 U	1 U	1 U	50 U	50 U	50 U	50 U	50 U	50 U	2.6 J	NS	50 U	50 U	50 U	50 U	0.94 JIHM5	NS	NS	NS	NS
CO26-PZM007	Methyl tertiary-butyl ether	1 U	1 U	NS	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Methylene Chloride	1 U	1 U	1 U	1 U	1 U	89.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.6	1 U	1 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Styrene	123	2.8	8	1 U	1 U	72.1	45.5	25.5	83.7	56.5	56.9	97.8	1 U	69.5	77.5	42.5	56.2	57.5	63.6	18.6	29	NS	64.8	0.75 J	36.3	64.6	1 U	NS	NS	NS	NS
CO26-PZM007	Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Toluene	291	19.9	1,050	1 U	1 U	262	136	73.7	206	163	157	236	1 U	202	201	106	153	130	142	51.4	117	NS	179	1.1	82.8	182	1.4 M5	43.9	16.8 ML	87	179
CO26-PZM007	trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	trans-1,4-Dichloro-2-butene	1 U	1 U	5 U	1 U	5 U	25 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 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	NS	NS	NS	NS
CO26-PZM007	Trichloroethene	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Vinyl Acetate	1 U	2 U	10 U	2 U	10 U	50 U	2 U	1 U	2 U	10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	25 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 U	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO26-PZM007	Xylenes	409	8	248	1 U	3 U	312	195	110	344	221	220	337	1 U	242	281	170	205	236	259	84.5	207	NS	300	4	141	244	1.8 JM5	74.7	42.4	153	250
CO26-PZM007	Naphthalene	2,920	46.6	59	6.4	3.8	4,020	1,900	937	2,140	1,940	3,770	6,130 L1	2 U	2,390	3,310	1,410	2,020	3,580	3,720	961	2,590	NS	3,390	43.7	2,030	2,170 CL	33.8 M5	966	409 MLR1	1,840	2,880

Appendix D
Cell 5 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO55-PZM000	1,1,1,2-Tetrachloroethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,1,1-Trichloroethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,1,2-Trichloroethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,1-Dichloroethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,1-Dichloroethene	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,2,3-Trichloropropane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,2-Dibromo-3-chloropropane	NS	5 U	25 U	5 U	5 U	NS	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	NS	NS	NS	NS
CO55-PZM000	1,2-Dibromoethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,2-Dichlorobenzene	NS	5 U	NS	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,2-Dichloroethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,2-Dichloropropane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	1,4-Dichlorobenzene	NS	5 U	NS	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	2-Butanone	NS	25 U	50 U	25 U	10 U	NS	5 U	5 U	5 U	10 U	10 U	10 U	5 U	81.5	1.8 J	10 U	10 U	10 U	10 U	10 U	2.6 J	10 U	10 U	50 U	10 U	10 U	10 U	NS	NS	NS	NS
CO55-PZM000	2-Hexanone	NS	25 U	50 U	25 U	10 U	NS	5 U	5 U	5 U	10 U	10 U	10 U	5 U	25.6	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	1.8 J	10 U	10 U	NS	NS	NS	NS
CO55-PZM000	4-Methyl-2-pentanone	NS	25 U	50 U	25 U	10 U	NS	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U	NS	NS	NS	NS
CO55-PZM000	Acetone	NS	54.5	69.4	39.5	10 U	NS	5.9 J	9.4 J	36.1	4 J	11.8	50 MHR1	5 U	372	6 J	8.9 J	6.3 JB	6.9 J	31.6	8.7 J	320	15.4	10 U	28.8 J	11.7	10 U	10 U	NS	NS	NS	NS
CO55-PZM000	Acrylonitrile	NS	10 U	10 U	10 U	2 U	NS	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	20 U	4 U	4 U	4 U	NS	NS	NS	NS
CO55-PZM000	Benzene	NS	1,230	835	316	18.1	NS	38.5	15.6	8.2	15.8	7.9	1 U	9.4	11.8	47.5	1 U	1 U	38	1 U	6	3.5	23.5	1 U	222	1.2	1 U	1 U	1 U	1 U	0.63 J	1.6
CO55-PZM000	Bromochloromethane	NS	5 U	NS	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Bromodichloromethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Bromoform	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Bromomethane	NS	5 U	5 U	5 U	1 U	NS	1.7	2.5	1 U	0.6 JB	6.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.2 B	4.2	1.2 CL	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Carbon Disulfide	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Carbon Tetrachloride	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Chlorobenzene	NS	5 U	5 U	5 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.32 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Chloroethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Chloroform	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Chloromethane	NS	5 U	5 U	5 U	1 U	NS	1 U	1 J	1 U	1 U	2.2	1.6	1 U	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1.9	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	cis-1,2-Dichloroethene	NS	5 U	NS	5 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	cis-1,3-Dichloropropene	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Dibromochloromethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Dibromomethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Ethylbenzene	NS	11.1	8.8	5 U	1 U	NS	1.6	0.47 J	1 U	0.53 J	0.29 J	1 U	0.23 J	0.53 J	3	1 U	1 U	1.7	1 U	1 U	1 U	0.63 J	1 U	7.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CO55-PZM000	Iodomethane	NS	5 U	250 U	5 U	50 U	NS	1 U	2.5 J	1 U	50 U	50 U	50 U	1 U	1 U	50 U	50 U	50 U	50 U	50 U	50 U	2.1 J	50 U	50 U	250 U	50 U	50 U	50 U	NS	NS	NS	NS
CO55-PZM000	Methyl tertiary-butyl ether	NS	5 U	NS	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Methylene Chloride	NS	7.6	6.8	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Styrene	NS	7.1	7.3	5 U	1 U	NS	1.2	1 U	1 U	0.74 J	1 U	1 U	1 U	1 U	2.3	1 U	1 U	0.88 J	1 U	1 U	1 U	0.43 J	1 U	30.8	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Tetrachloroethene	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Toluene	NS	194	395	95.5	10.1	NS	16.3	5.8	4.3	6.9	2.7	0.33 JML	5.9	6	32	1.2	1 U	8.6	1 U	0.82 J	3.8	7.6	0.32 J	12.5	0.41 J	1 U	1 U	1 U	0.47 J	1.2
CO55-PZM000	trans-1,2-Dichloroethene	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	trans-1,3-Dichloropropene	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	trans-1,4-Dichloro-2-butene	NS	5 U	25 U	5 U	5 U	NS	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO55-PZM000	Trichloroethene	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Trichlorofluoromethane	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Vinyl Acetate	NS	10 U	50 U	10 U	10 U	NS	2 U	1 U	2 U	10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Vinyl Chloride	NS	5 U	5 U	5 U	1 U	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	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	NS	NS	NS	NS
CO55-PZM000	Xylenes	NS	141	161	46.9	7.4	NS	26.4	8.1	6	9.1	3.2	3 U	5.8	8.6	54.7	3.3	3 U	23.7	3 U	3 U	4.2	10.6	3 U	158	3 U	3 U	3 U	3 U	3 U	3 U	1.5 J
CO55-PZM000	Naphthalene	NS	569	778	268	77.7	NS	176	31.9	92.2	56	71	2 U	76.7	91.7	331	2 J	2 U	141	2 U	8.9	5.8	45.4	1.7 J	1,920	3.4	2 U	2 U	2 U	11.8	2.8	5.4

Appendix D
Cell 5 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO56-PZP001	1,1,1,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	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	NS	NS	NS	NS
CO56-PZP001	1,1,1-Trichloroethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	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	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	NS	NS	NS	NS
CO56-PZP001	1,1,2-Trichloroethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	1,1-Dichloroethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	1,1-Dichloroethene	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	1,2,3-Trichloropropane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	1,2-Dibromo-3-chloropropane	NS	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	25 U	25 U	25 U	1 U	5 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	NS	NS	NS
CO56-PZP001	1,2-Dibromoethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	1,2-Dichlorobenzene	NS	5 U	NS	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	1,2-Dichloroethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	1,2-Dichloropropane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	1,4-Dichlorobenzene	NS	5 U	NS	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	2-Butanone	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	5 U	25 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO56-PZP001	2-Hexanone	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	5 U	25 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO56-PZP001	4-Methyl-2-pentanone	NS	25 U	50 U	25 U	50 U	25 U	25 U	25 U	25 U	50 U	50 U	50 U	5 U	25 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO56-PZP001	Acetone	NS	104	50 U	25 U	50 U	25 U	25 U	25 U	25 U	25.8 J	50 U	50.2	7.6 JL2	109	16.2 J	18.9 J	29.2 JB	18 J	65	50 U	70.1 B	28.2 J	77.3	42.8 J	31.7 J	50 U	50 U	NS	NS	NS	NS
CO56-PZP001	Acrylonitrile	NS	10 U	10 U	10 U	10 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	4 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	NS	NS	NS	NS
CO56-PZP001	Benzene	NS	478	870	515	549	639	359	484	380	391	503	437	345	385	438	346	319	192	203	246	229	248	361	266	352	224	255	237	208	244	300
CO56-PZP001	Bromochloromethane	NS	5 U	NS	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Bromodichloromethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Bromoform	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Bromomethane	NS	5 U	5 U	5 U	5 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	5 U	11	12 CL	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Carbon Disulfide	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Carbon Tetrachloride	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Chlorobenzene	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.6 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Chloroethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Chloroform	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1.5 J	5 U	5 U	0.5 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Chloromethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	cis-1,2-Dichloroethene	NS	5 U	NS	5 U	5 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	1.4 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	cis-1,3-Dichloropropene	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Dibromochloromethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Dibromomethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Ethylbenzene	NS	17.3	18.8	19.4	20.4	21.4	21.1	20.1	15.1	13.4	14.6	14	9.2	14.3	13.8	9.6	12.8	8.5	8.8	9.4	8.2	8.6	10.5	8.6	11.7	10.1	10.7	9.4	8.5	7.5	10.4
CO56-PZP001	Iodomethane	NS	5 U	250 U	5 U	250 U	5 U	5 U	5 U	5 U	250 U	250 U	250 U	1 U	5 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	NS	NS	NS	NS
CO56-PZP001	Methyl tertiary-butyl ether	NS	5 U	NS	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Methylene Chloride	NS	11	6.2	6.2	5 U	6.5 B	5 U	5 U	5 U	3.9 JB	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	4.4 JB	5 U	5 U	4.4 J	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Styrene	NS	47.4	57.6	74.2	81.8	79.7	62.6	75.2	62	61.1	80.4	78.5	36.2	63	85.3	43.2	46	34.6	43.3	52.2	41.2	38.9	86	57.2	58.6	27.6	58.8	NS	NS	NS	NS
CO56-PZP001	Tetrachloroethene	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Toluene	NS	198	404	211	345	360	143	208	176	87.3	136	186	149	103	140	169	177	18.3	45.7	117	88.1	61.4	122	89	157	21.3	95.5	129	108	73.1	91.6
CO56-PZP001	trans-1,2-Dichloroethene	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	trans-1,3-Dichloropropene	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	trans-1,4-Dichloro-2-butene	NS	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	25 U	25 U	25 U	1 U	5 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	NS	NS	NS
CO56-PZP001	Trichloroethene	NS	5 U	5 U	5 U	5 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	2.3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Trichlorofluoromethane	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Vinyl Acetate	NS	10 U	50 U	10 U	50 U	10 U	10 U	5 U	10 U	50 U	50 U	50 U	2 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Vinyl Chloride	NS	5 U	5 U	5 U	5 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	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS
CO56-PZP001	Xylenes	NS	328	390	399	401	432	317	405	281	256	295	313	196	282	289	219	266	190	182	200	186	190	258	197	251	195	235	217	176	150	244
CO56-PZP001	Naphthalene	NS	30,300	2,500	5,330	8,140	993	7,310	8,870	10,800	2,580	32,300	17,900 L1	4,670	3,440	4,130	1,760	2,800	1,870	3,290	2,400	1,930	2,200 MHML	2,790	3,750	3,250	1,470	2,180 E	2,660	1,970	2,080 E	3,290 E

Appendix D
Cell 5 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO57-PZP002	1,1,1,2-Tetrachloroethane	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,1,1-Trichloroethane	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,1,2,2-Tetrachloroethane	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,1,2-Trichloroethane	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,1-Dichloroethane	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,1-Dichloroethene	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,2,3-Trichloropropane	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,2-Dibromo-3-chloropropane	NS	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,2-Dibromoethane	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,2-Dichlorobenzene	NS	1 U	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,2-Dichloroethane	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,2-Dichloropropane	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	1,4-Dichlorobenzene	NS	1 U	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	2-Butanone	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	6.9 J	10 U	10 U	10 U	10 U	10 U	10 U	3.7 J	10 U	10 U	2.6 J	7.3 J	NS	NS	NS	NS	NS	NS
CO57-PZP002	2-Hexanone	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.7 J	2.7 J	NS	NS	NS	NS	NS	NS
CO57-PZP002	4-Methyl-2-pentanone	NS	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	Acetone	NS	5 U	10 U	5 U	10 U	5 U	5 U	5.5 JL1	134 M1	4.5 J	10 U	33.8 B	14.9	120	6.4 J	3.3 J	9.1 JB	4.1 J	35.8	10 U	321	9.1 J	6 J	7.8 J	41.6	NS	NS	NS	NS	NS	NS
CO57-PZP002	Acrylonitrile	NS	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	Benzene	NS	23.9	895	3	1.2	9.7	14.7	23	1 U	1 U	1.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4	1 U	1 U	1 U	NS	NS	NS	NS	1 U	1 U
CO57-PZP002	Bromochloromethane	NS	1 U	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	Bromodichloromethane	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Bromoform	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Bromomethane	NS	1 U	1 U	1 U	1 U	10.8	1.6	1.7	7.8	5 B	6.3	7.5	2.4	1.1	0.95 J	1.9	2.4	1 U	0.94 J	0.86 JCL	2.5	0.92 J	2.3 CL	1 U	1.4	NS	NS	NS	NS	NS	NS
CO57-PZP002	Carbon Disulfide	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Carbon Tetrachloride	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Chlorobenzene	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Chloroethane	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Chloroform	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Chloromethane	NS	1 U	1 U	1 U	1 U	5.7	1 U	3.2	1 U	2	1 U	3	1 U	1.5	3.3	1 U	1 U	1 U	0.98 J	1 U	3.2	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	cis-1,2-Dichloroethene	NS	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.29 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	cis-1,3-Dichloropropene	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Dibromochloromethane	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Dibromomethane	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Ethylbenzene	NS	1 U	4.7	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	1 U	1 U
CO57-PZP002	Iodomethane	NS	1 U	50 U	1 U	50 U	1 U	1 U	1 U	1 U	50 U	50 U	50 U	1 U	1 U	5 JCH	50 U	50 U	50 U	50 U	0.69 JCL	3.2 J	50 U	50 U	50 U	50 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	Methyl tertiary-butyl ether	NS	1 U	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	Methylene Chloride	NS	1 U	1 U	1 U	1 U	1 B	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 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	Styrene	NS	1 U	2.8	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	Tetrachloroethene	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Toluene	NS	11.3	349	1.3	1.1	0.88 J	1.5	2.6	1 U	0.24 J	0.33 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.45 J	0.74 J	1 U	1 U	1 U	NS	NS	NS	NS	1 U	1 U
CO57-PZP002	trans-1,2-Dichloroethene	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	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	NS	NS	NS	NS	NS
CO57-PZP002	trans-1,3-Dichloropropene	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	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	NS	NS	NS	NS	NS
CO57-PZP002	trans-1,4-Dichloro-2-butene	NS	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	Trichloroethene	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Trichlorofluoromethane	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	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	NS	NS	NS	NS	NS
CO57-PZP002	Vinyl Acetate	NS	2 U	10 U	2 U	10 U	2 U	2 U	1 U	2 U	10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	Vinyl Chloride	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.33 J	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 U	1 U	NS	NS	NS	NS	NS	NS
CO57-PZP002	Xylenes	NS	11.7	79.1	1 U	3 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	NS	NS	NS	NS	3 U	3 U
CO57-PZP002	Naphthalene	NS	8.8	18.6	2 U	2 U	4.9	5.5	2.7	2 U	2 U	2 U	2 U	2 U	4.2	2 U	2 U	2 U	0.93 J	2 U	2 U	10.6	4.6	1.2 J	2.1	1.8 J	NS	NS	NS	NS	2 U	2 U

Appendix D
Cell 5 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO58-PZM001	1,1,1,2-Tetrachloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	1,1,1-Trichloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	1,1,2,2-Tetrachloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	1,1,2-Trichloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	1,1-Dichloroethane	NS	5 U	5 U	5 U	1 U	0.46 J	0.5 J	0.78 J	0.46 J	1 U	0.4 J	0.39 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 J	0.56 J	1 U	1 U	0.37 J	1 U	0.68 J	0.9 JM5	NS	NS	NS	NS
CO58-PZM001	1,1-Dichloroethene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	1,2,3-Trichloropropane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	1,2-Dibromo-3-chloropropane	NS	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	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	NS	NS	NS	NS
CO58-PZM001	1,2-Dibromoethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	1,2-Dichlorobenzene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	1,2-Dichloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	1,2-Dichloropropane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	1,4-Dichlorobenzene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	2-Butanone	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5.1 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	4.1 J	10 U	10 U	10 U	NS	NS	NS	NS
CO58-PZM001	2-Hexanone	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	2.8 J	0.98 J	10 U	10 U	NS	NS	NS	NS
CO58-PZM001	4-Methyl-2-pentanone	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS
CO58-PZM001	Acetone	NS	64.2	50 U	25 U	10 U	5 U	5 U	5 U	5 U	3 J	10 U	19.9	5 U	56.2	3.8 J	3.2 J	8.3 JB	3.4 J	3.1 J	10 U	72.2	6.8 J	10 U	15.8	20.5	10 U	17.1 M5	NS	NS	NS	NS
CO58-PZM001	Acrylonitrile	NS	10 U	10 U	10 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	NS	NS	NS
CO58-PZM001	Benzene	NS	265	851	241	220	195	231	270	247	272	276	316	187	256	238	98.7	185	41.4	195	114	180	174	224	189	224	237	243 M5	81.2	122	57.5	177
CO58-PZM001	Bromochloromethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Bromodichloromethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Bromoform	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Bromomethane	NS	5 U	5 U	5 U	1 U	8.2	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 U	1 U	0.62 J	1.1	1.7 CL	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Carbon Disulfide	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Carbon Tetrachloride	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Chlorobenzene	NS	5 U	5 U	5 U	1 U	1 U	0.37 J	1 U	1 U	0.26 J	1 U	1 U	0.42 J	1 U	0.55 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.38 J	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Chloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Chloroform	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Chloromethane	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.82 J	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	cis-1,2-Dichloroethene	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 U	0.26 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	cis-1,3-Dichloropropene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Dibromochloromethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Dibromomethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Ethylbenzene	NS	13.1	11.8	11.5	11.1	11.2	11.7	14.3	13.8	14.7	11.3	13.4	5.9	12.4	11.8	5.4	9.1	2.4	9.2	5.2	7.9	9.4	10.9	8.9	10.3	10.6	11.4 M5	5.2	6.3	3.2	9.1
CO58-PZM001	Iodomethane	NS	5 U	250 U	5 U	50 U	1 U	1 U	1 U	1 U	50 U	50 U	50 U	1 U	1 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS
CO58-PZM001	Methyl tertiary-butyl ether	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Methylene Chloride	NS	9	6	8.1	1 U	1.1 B	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Styrene	NS	30	20	35.9	21.6	24.2	38	43.9	36.7	45.2	38.3	45.1	14.1	38.5	34.3	11.5	28.6	2.8	22.3	8.1	14.9	21.5	23	21.1	26.3	22.8	27.9 M5	NS	NS	NS	NS
CO58-PZM001	Tetrachloroethene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Toluene	NS	80.4	318	94.7	68.2	56	85.6	108	93.2	138	128	146	63.3	106	93.9	34.5	59.9	13.3	41.5	30.3	51.7	75.4	92.5	75.6	89.6	63.3	68.5 M5	20.2	27.8	10.4	55.4
CO58-PZM001	trans-1,2-Dichloroethene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	trans-1,3-Dichloropropene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	trans-1,4-Dichloro-2-butene	NS	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	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	NS	NS	NS	NS
CO58-PZM001	Trichloroethene	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 U	0.52 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Trichlorofluoromethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Vinyl Acetate	NS	10 U	50 U	10 U	10 U	2 U	2 U	1 U	2 U	10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Vinyl Chloride	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO58-PZM001	Xylenes	NS	202	220	214	190	182	201	239	218	245	199	249	102	213	207	83.5	155	42.4	149	76.6	123	156	180	142	174	166	197 M5	74.8	101	41.6	142
CO58-PZM001	Naphthalene	NS	1,870	1,940	1,900	1,750	865	2,290	2,320	3,610	2,490	2,870	3,040 L1	1,420	1,980	2,310	572	1,540	681	2,140	701	1,320	1,870	1,250	3,060	1,940	1,950 CL	8,170 M5	905	1,350	662	698

Appendix D
Cell 5 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO59-PZP002	1,1,1,2-Tetrachloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,1,1-Trichloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,1,2,2-Tetrachloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,1,2-Trichloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,1-Dichloroethane	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 U	1 U	0.32 J	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,1-Dichloroethene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,2,3-Trichloropropane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,2-Dibromo-3-chloropropane	NS	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	NS	NS
CO59-PZP002	1,2-Dibromoethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,2-Dichlorobenzene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,2-Dichloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,2-Dichloropropane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	1,4-Dichlorobenzene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	2-Butanone	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5.9 J	10 U	10 U	10 U	10 U	10 U	10 U	3.1 J	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS
CO59-PZP002	2-Hexanone	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.6 J	10 U	10 U	NS	NS	NS	NS	NS
CO59-PZP002	4-Methyl-2-pentanone	NS	25 U	50 U	25 U	10 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	0.89 J	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS
CO59-PZP002	Acetone	NS	50.7	50 U	25 U	10 U	5 U	5 U	6.2 JL1	5 U	4.4 J	10 U	19	9.5 JL2	64.5	5.8 J	4.6 J	8.6 JB	4 J	30.4 R1	6.2 J	304	6.2 J	10 U	7.7 J	9.2 J	9.3 J	NS	NS	NS	NS	NS
CO59-PZP002	Acrylonitrile	NS	10 U	10 U	10 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	NS	NS	NS	NS
CO59-PZP002	Benzene	NS	348	97.2	377	106	389	3.6	62.4	9.5	1.2	255	393	1 U	1 U	144	1 U	1 U	0.61 J	17.5	1 U	2.4	4.6	7.4	1 U	17	1 U	NS	NS	1 U	2.2	231
CO59-PZP002	Bromochloromethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Bromodichloromethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Bromoform	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Bromomethane	NS	5 U	5 U	5 U	1 U	8.7	1 U	1 U	4.2	0.65 JB	5.5	1 U	1 U	1.7	1 U	1 U	1 U	1 U	0.65 J	1 U	1.6	1.8	2.2 CL	1 U	1.5 CL	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Carbon Disulfide	NS	5 U	5 U	5 U	1 U	0.43 J	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Carbon Tetrachloride	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Chlorobenzene	NS	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.52 J	1 U	1 U	1 U	0.43 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Chloroethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Chloroform	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Chloromethane	NS	5 U	5 U	5 U	1 U	4.8	1 U	1 U	1 U	1 U	1 U	1	1 U	1.4	1	1 U	1 U	1 U	0.78 J	1 U	1.5	1.5	1 U	1 U	1.1	1 U	NS	NS	NS	NS	NS
CO59-PZP002	cis-1,2-Dichloroethene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	cis-1,3-Dichloropropene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Dibromochloromethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Dibromomethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Ethylbenzene	NS	11.2	6	19.3	5.8	20.4	1.3	3.6	0.55 J	1 U	12.2	19.5	1 U	1 U	7.4	1 U	1 U	1 U	1.3	1 U	1 U	1 U	1 U	1 U	0.9 J	1 U	NS	NS	1 U	0.48 J	11
CO59-PZP002	Iodomethane	NS	5 U	250 U	5 U	50 U	1 U	1 U	1 U	4.3 J	50 U	50 U	50 U	1 U	1 U	50 U	50 U	50 U	50 U	50 U	50 U	3.2 J	50 U	50 U	50 U	50 U	50 U	NS	NS	NS	NS	NS
CO59-PZP002	Methyl tertiary-butyl ether	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Methylene Chloride	NS	7.7	5 U	6.8	1 U	1.2 B	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Styrene	NS	10.4	5 U	21.2	4.3	19.5	1 U	3	1 U	1 U	7.6	22.8	1 U	1 U	2.1	1 U	1 U	1 U	0.63 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Tetrachloroethene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Toluene	NS	40.5	107	221	62.7	241	3.2	34.1	4.7	0.22 J	122	230	1 U	0.37 J	64.7	1 U	1 U	0.88 J	2.5	1 U	1.3	1.5	2.8	1 U	6.3	1 U	NS	NS	1 U	2.2	80.1
CO59-PZP002	trans-1,2-Dichloroethene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	trans-1,3-Dichloropropene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	trans-1,4-Dichloro-2-butene	NS	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	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	NS	NS	NS	NS	NS
CO59-PZP002	Trichloroethene	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Trichlorofluoromethane	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Vinyl Acetate	NS	10 U	50 U	10 U	10 U	2 U	2 U	1 U	2 U	10 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Vinyl Chloride	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS	NS
CO59-PZP002	Xylenes	NS	172	89.8	335	92.4	321	12.4	56.4	7.4	3 U	199	325	1 U	2.9 J	116	3 U	3 U	3.4	12.6	3 U	1.3 J	3.1	5.2	3 U	11.9	3 U	NS	NS	3 U	4.1	173
CO59-PZP002	Naphthalene	NS	969	414	1,680	451	642	18.6	229	34.7	2	964 H1	4,720 L1	3.3	1.3 J	492	7.3	2 U	2 U	94.5	2 U	5.7	19.9	26.1	2.2 R1	31.4	68.6	NS	NS	2 U	2.8	852

Appendix D
Cell 5 Historical Data Summary

Client Sample ID	Parameter	5/1/2013	6/1/2014	9/1/2014	11/1/2014	3/1/2015	6/1/2015	9/1/2015	11/1/2015	6/1/2016	9/1/2016	12/1/2016	3/1/2017	6/1/2017	9/1/2017	12/1/2017	3/1/2018	6/1/2018	9/1/2018	12/1/2018	3/1/2019	6/1/2019	10/1/2019	12/1/2019	2/1/2020	5/1/2020	9/1/2020	12/1/2020	3/1/2021	6/1/2021	9/1/2021	12/1/2021
CO60-PZP001	1,1,1,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,1,1-Trichloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,1,2-Trichloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,1-Dichloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,1-Dichloroethene	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,2,3-Trichloropropane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,2-Dibromo-3-chloropropane	NS	5 U	25 U	5 U	25 U	5 U	5 U	1 U	5 U	25 U	5 U	5 U	1 U	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	NS	NS	NS	NS
CO60-PZP001	1,2-Dibromoethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,2-Dichlorobenzene	NS	5 U	NS	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,2-Dichloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,2-Dichloropropane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	1,4-Dichlorobenzene	NS	5 U	NS	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	2-Butanone	NS	25 U	50 U	25 U	50 U	25 U	25 U	5 U	25 U	50 U	10 U	10 U	5 U	5.1 J	3.8 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS
CO60-PZP001	2-Hexanone	NS	25 U	50 U	25 U	50 U	25 U	25 U	5 U	25 U	50 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	0.84 J	10 U	10 U	NS	NS	NS	NS
CO60-PZP001	4-Methyl-2-pentanone	NS	25 U	50 U	25 U	50 U	25 U	25 U	5 U	25 U	50 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS
CO60-PZP001	Acetone	NS	32.3	76.1	25 U	50 U	25 U	25 U	8.2 JL1	25 U	27.1 J	10 U	23	9.7 JL2	84.9	38.7	7.9 J	13.3 B	8.9 J	6.5 J	10 U	10.7 B	12.8	10.9	10 U	15.1	8.2 J	27.8 M5	NS	NS	NS	NS
CO60-PZP001	Acrylonitrile	NS	10 U	10 U	10 U	10 U	20 U	20 U	4 U	20 U	20 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	NS	NS	NS	NS
CO60-PZP001	Benzene	NS	434	479	361	500	467	186	371	189	189	28.3	151	133	260	310	166	400	172	218	197	147	181	254	1 U	249	244	264 M5	318	241	201	259
CO60-PZP001	Bromochloromethane	NS	5 U	NS	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Bromodichloromethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Bromoform	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Bromomethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	3.1 JB	5.5	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.1	3.9	1.6 CL	1 U	1.5 CL	1 U	1 M5	NS	NS	NS	NS
CO60-PZP001	Carbon Disulfide	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Carbon Tetrachloride	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Chlorobenzene	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	1 U	1 U	0.26 J	0.56 J	0.61 J	1 U	1 U	1 U	0.56 J	1 U	1 U	1 U	1 U	1 U	0.31 J	0.48 J	0.38 JM5	NS	NS	NS	NS
CO60-PZP001	Chloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Chloroform	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	2.6 J	0.49 J	1.7	1.8	1 U	0.32 J	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	NS	NS	NS
CO60-PZP001	Chloromethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	1 U	1.8	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	3.8	1 U	1 U	1.1	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	cis-1,2-Dichloroethene	NS	5 U	NS	5 U	5 U	5 U	5 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	0.32 J	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	NS	NS	NS
CO60-PZP001	cis-1,3-Dichloropropene	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Dibromochloromethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Dibromomethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Ethylbenzene	NS	12.8	13.1	13.1	11.5	14.3	8.5	14.1	6.1	5.6	0.79 J	3.7	2.4	7.1	8.7	3.1	8	7.2	7.8	6.5	5	5.8	8	1 U	7	10.1	8.7 M5	11	8.8	6.5	8
CO60-PZP001	Iodomethane	NS	5 U	250 U	5 U	250 U	5 U	5 U	1 U	5 U	250 U	50 U	50 U	1 U	1 U	50 U	50 U	50 U	50 U	50 U	50 U	2.1 J	50 U	50 U	50 U	50 U	50 U	1.3 JHM5	NS	NS	NS	NS
CO60-PZP001	Methyl tertiary-butyl ether	NS	5 U	NS	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Methylene Chloride	NS	7.4	7.8	6.3	5 U	6.8 B	5 U	1 U	5 U	4.3 JB	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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Styrene	NS	44.8	44.4	50.2	74.2	47.2	23.1	60.9	16.2	11.1	1.4	16.4	3.4	17.6	45.6	15.9	63.6	14.3	35.2	34.6	4.7	15	33.9	1 U	25.9	29.9	57.5 M5	NS	NS	NS	NS
CO60-PZP001	Tetrachloroethene	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Toluene	NS	135	195	101	202	228	48.8	69.9	25.8	11.8	2.3	19.3	12.9	33.8	31	40.5	156	14.1	36.1	53.8	16.2	13.4	20.8	1 U	35.1	23.7	60.7 M5	113	60.5	19.2	37.8
CO60-PZP001	trans-1,2-Dichloroethene	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	trans-1,3-Dichloropropene	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	trans-1,4-Dichloro-2-butene	NS	5 U	25 U	5 U	25 U	5 U	5 U	1 U	5 U	25 U	5 U	5 U	1 U	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	NS	NS	NS	NS
CO60-PZP001	Trichloroethene	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	0.64 J	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	NS	NS	NS
CO60-PZP001	Trichlorofluoromethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Vinyl Acetate	NS	10 U	50 U	10 U	50 U	10 U	10 U	1 U	10 U	50 U	10 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Vinyl Chloride	NS	5 U	5 U	5 U	5 U	5 U	5 U	1 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 U	1 U	1 U	1 U	1 U	NS	NS	NS	NS
CO60-PZP001	Xylenes	NS	245	287	280	270	290	153	278	123	96.8	16.7	73.9	47.3	140	176	63.1	183	148	167	148	111	117	172	3 U	162	211	225 M5	269	225	164	184
CO60-PZP001	Naphthalene	NS	1,980	2,800	2,350	7,640	2,420	1,050	2,180	892	1,010	198	676	373	1000	2,020	446	1,620	1,700	2,470	1,540	1,310	2,100	1,590	1.8 J	1,700	1,140	9,620 M5	3,990	2,320	1,650	2,670